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What railroads are doing to eliminate **diesel sparks,** stop wayside fires..... p. 14

ber 13, 1961

RAILWAY AGE WEEKLY

Railroad Research

- *Major Problems*
- *Equipment Needs*
- *Roadbed and Track*
- *Damage Prevention*
- *Signaling*
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- *New Raw Materials*
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- *Product Design*
- *New Test Procedures*
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SPECIAL TARGETS FOR RAILROAD RESEARCH

p. 19

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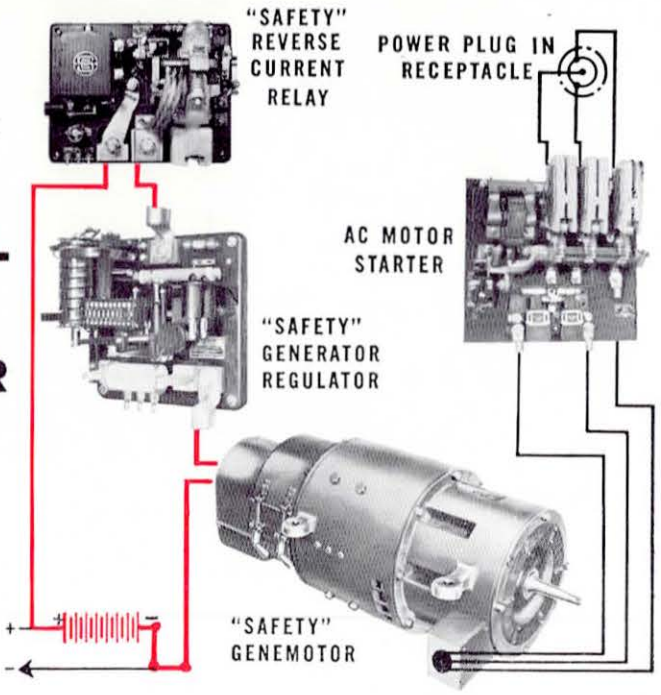

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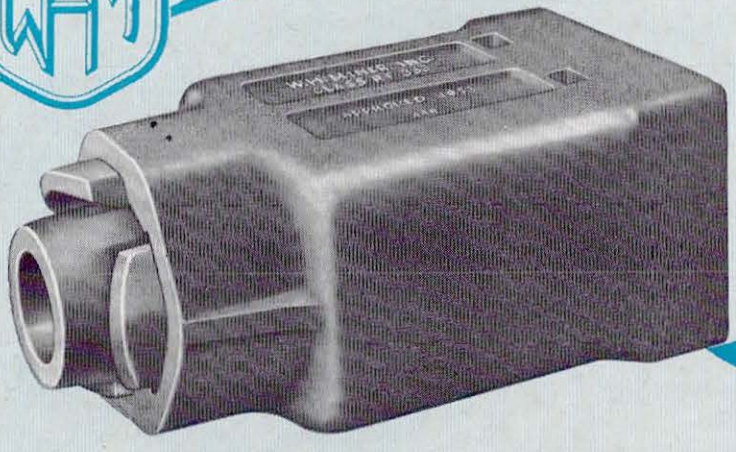

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RAILWAY AGE

WEEK AT A GLANCE

Nov. 13, 1961 • Vol. 151, No. 20

NYC and PRR resume merger negotiations

The two eastern giants may have their formal application before the ICC within two months. The merger would produce savings estimated at more than $100 million a year .....p. 9

Northern Pacific cuts costs with 'traveling store'

The "store," a truck equipped with an hydraulic hoist, is used on the Fargo division. The operation is being expanded and soon will cover the entire NP system p.11

What RRs do to eliminate diesel sparks

The sparks, among other things, cause right-of-way fires. Proper maintenance of diesel engines, plus certain mechanical changes, can reduce sparking from diesel exhaust ..p.14

Special targets for railroad research

Top railroad researchers met last week to take stock of their work, to evaluate the more pressing needs of railroads and the best ways to meet them p.19

Export coal up, prospects good

N&W is "extremely optimistic about the coal business"—partly because of sharply rising shipments to the Far East, Europe and South America p.21

How the B&O treats and re-uses old crossties

The road plans to re-use a large proportion of the millions of ties salvaged from abandoned track during the next 10 years. The ties will perform, and look, like new ones ..p.30

The Action Page—Umbrella or shillelah?

Railroads are not allowed to make full use of their superior line-haul economy. This so-called rate umbrella is really a shillelah used against railroads by regulators and competitors ..p.42

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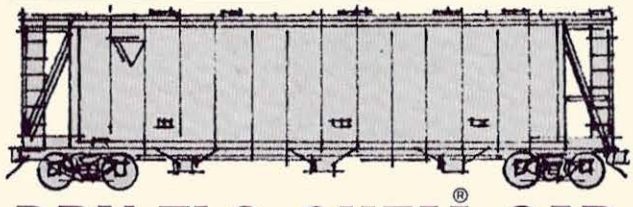

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WEEK AT A GLANCE

Short and Significant

The Commerce Department's Transportation Report . . .

was sent to the White House last week but its contents were not immediately made public. President Kennedy will use the report in framing a transportation message to Congress.

Net income of Class I railroads . . .

amounted to $41 million in September, compared with $26 million in September 1960. This year's nine-months net was $182 million, down from 1960's $304 million.

Thirty-three roads . . .

failed to earn their fixed charges in the first nine months of 1961. Rate of return for all Class I roads during the 12 months ended with September averaged 1.71%.

New non-op demands in Canada . . .

call for an immediate 7½ cents an hour wage increase, rising as high as a possible 25 cents over the next two years. Unions will also ask improved job security.

New York State voters have approved . . .

a constitutional amendment permitting the state to guarantee up to $100 million in Port of New York Authority bonds to finance the purchase of railroad commuter cars.

Purchase of the Georgia & Florida . . .

by the Southern for $7.5 million has been approved by a federal district judge in Georgia. The transaction still must gain the approval of the Interstate Commerce Commission.

Boston & Maine directors . . .

have authorized the road's president, P. B. McGinnis, to prepare a corporate reorganization plan as a first step toward a contemplated diversification program.

Current Statistics

Operating Revenues	
9 mos., 1961	$6,772,848,568
9 mos., 1960	7,212,974,820
Operating expenses	
9 mos., 1961	5,429,147,181
9 mos., 1960	5,724,682,754
Taxes	
9 mos., 1961	734,157,037
9 mos., 1960	781,660,279
Net railway operating income	
9 mos., 1961	316,939,846
9 mos., 1960	433,542,127
Net income estimated	
9 mos., 1961	182,000,000
9 mos., 1960	304,000,000
Carloadings revenue freight	
43 wks., 1961	23,663,955
43 wks., 1960	25,837,637
Freight cars on order	
Oct. 1, 1961	10,133
Oct. 1, 1960	21,662
Freight cars delivered	
9 mos., 1961	25,139
9 mos., 1960	43,719

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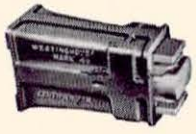

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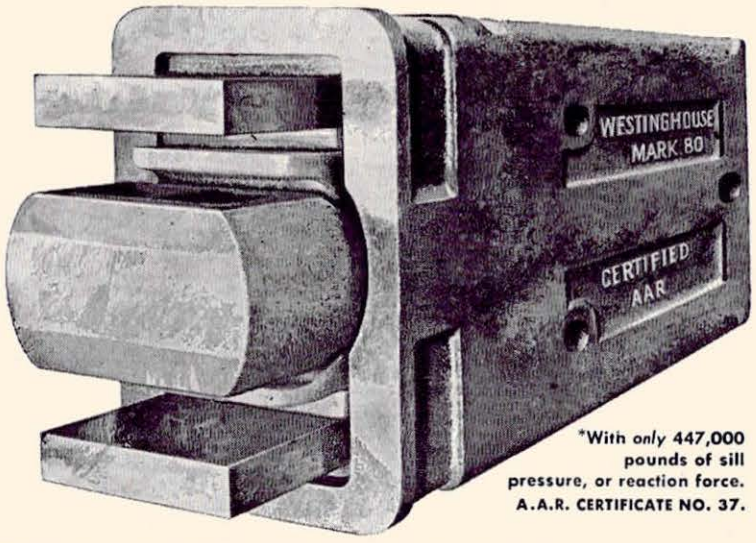

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New York Central and Pennsylvania: How They Compare

	NEW YORK CENTRAL	PENNSYLVANIA	TOTAL
Route Miles	10,264	9,867	**20,131**
Locomotives	2,065	1,941	**4,006**
Freight-train Cars	107,664	120,866	**228,530**
Passenger-Train Cars	3,599	4,395	**7,994**
Operating Revenues, 1960	$674,543,373	$843,705,224	**$1,518,248,597**
Net Income, 1960	$1,038,253	(Def.) $7,819,112	**(Def.) $6,780,859**
Net Income, 9 months 1961	(Def.) $24,774,646	(Def.) $12,768,686	**(Def.) $37,543,332**

Figures based on 1960 annual reports and current income statements.

NYC, PRR Resume Merger Negotiations

► **The Story at a Glance: The New York Central and the Pennsylvania will move "as rapidly as possible" toward a merger that would create a 20,131-mile, $5-billion giant of a railroad in the East. Resumption of merger negotiations was announced last week—nearly three years after NYC abruptly terminated studies that had indicated such a union would produce savings of $100 million a year. The move apparently signaled on the part of New York Central, a readiness to end its vigorous objections to two other pending consolidations—C&O-B&O and N&W-NKP-Wabash.**

One of the worst-kept secrets in recent railroad history came out into the open last Wednesday: the New York Central and the Pennsylvania announced that they would ask the ICC for permission to merge as soon as satisfactory terms could be agreed upon.

The announcement, which followed separate meetings of NYC and PRR directors in New York and Philadelphia, came after several days of press reports that the two eastern roads had patched up a quarrel that began when NYC unilaterally terminated merger studies in January 1959.

A joint statement from PRR Chairman J. M. Symes and NYC President A. E. Perlman said the roads had reached "agreement to move forward as rapidly as possible toward a merger." There was some speculation that the merger application would be at the ICC soon after the New Year.

Such a timetable would not appear to be impossible. The statement pointed out that the findings of the initial merger studies—conducted over a 14-month period between Nov. 1, 1957, and Jan. 8, 1959—are still available. These studies, which indicated at the time that a merger would save the combined roads at least $100 million a year, will now be turned over to new joint committees which will "progress negotiations to an early conclusion."

Additional studies will, however, be undertaken to "bring the previous findings up to date, taking into consideration changes, such as equipment and facility improvements, expansion of various types of new services, and reduction of money-losing passenger operations, which have occurred in the nearly three years since the earlier talks ended," the statement said.

Directors from each road who will be members of the new joint committees set up to progress negotiations to a speedy conclusion are: Pennsylvania —Philip R. Clarke, retired president of City National Bank of Chicago; C. Jared Ingersoll, chairman of the board of the Muskogee Co.; Richard B. Mellon of Mellon National Bank plus Mr. Symes, ex officio; New York Central—Isaac Grainger, former president of Chemical Bank; Dr. R. Walter Graham, Jr., controller of City of Baltimore; Seymour H. Knox, chairman of the board, Marine Trust of Western New York and Mr. Perlman, ex officio.

The worsening financial condition of both roads, the Perlman-Symes statement indicated, gave impetus to the merger decision. NYC, which made a small profit in 1960 ($1,038,253), operated at a deficit of $24,774,646 during the first nine months of this year. PRR lost $7,819,112 last year, and reported a deficit of $12,768,686 during this year's first nine months. Neither road expects to make a profit on rail operations for 1961 as a whole.

The Perlman-Symes statement had this to say:

"The economic and competitive conditions which confronted the railroads when the original merger studies were initiated four years ago have worsened appreciably. A measure of relief from excessive taxation in some states, minor federal legislative help under the terms of the Transportation Act of 1958, and some cooperation from public agencies in support of money losing commuter service have been gained, but the need to increase efficiency and reduce costs through elimination of duplicating facilities and services is far greater now than in 1957 when the studies were begun.

"Time to assure maintenance of rail transportation as a private enterprise

(*Continued on page 38*)

B&O to Survey Shipper Needs

Baltimore & Ohio has launched a new traffic program aimed at "tailoring and pricing B&O service to meet specific needs of shippers."

The road's president, Jervis Langdon, Jr., said the program will include "a comprehensive analysis of the specific requirements of individual shippers which are served, or could be served, by the B&O, and prompt adjustment of rates and services to meet them."

Mr. Langdon said the program is the latest in a series of improvement projects designed to strengthen B&O's competitive position. Previously-announced projects toward this end have included a major car-repair program, improvement of roadway, and a speed-up in locomotive repairs.

The new traffic campaign, according to Vice President—Traffic J. W. Phipps, Jr., will open with a shipper survey to be made by B&O freight representatives in the 13-state area directly served by the road and at other points reached through connections.

These representatives will seek to determine what shipments are being made between various points, how the traffic is now moving, and what changes in rates and service could bring new traffic to B&O.

This survey will be on a continuing basis. "It is intended to be a meaningful examination of traffic, movement by movement, to permit tailoring and pricing of B&O service to meet specific needs of shippers," said Mr. Phipps.

Findings of this survey will be transmitted to a new centralized rate bureau at Baltimore. Here, indicated rate adjustments will be made. At the same time, trains will be rescheduled and other service changes will be made.

The road's Marketing Analysis Department has been incorporated into the rate bureau—a combination which B&O says "will permit a brand new kind of rate-making, with pricing of service aided and expedited by the findings of analysts studying current and future traffic trends."

Charles J. Henry, Jr., assistant vice president—traffic, will direct rate-related phases of the new program. J. C. McGohan, assistant vice president—traffic, will supervise sales.

WATCHING WASHINGTON WITH WALTER TAFT

• **MORE UMBRELLAS** have been opened by the ICC for truckers and water carriers. The Commission has condemned truck-competitive railroad rates as "destructive," even though they "appear to be compensatory, and in most instances exceed full costs." Heeding protests of water carriers, it has also condemned other railroad rates which are clearly above fully-distributed costs.

THE TRUCK-COMPETITIVE CASE, No. 33334, involves exception ratings on agricultural implements, tractors, road-making machinery, and like commodities moving within and between Western Trunk Line, Southwestern and Illinois Freight Association territories, and from those territories to the South. The condemnation of these ratings, which have been in effect about 1½ years, came in a decision by the Commission's Division 2. The decision was embodied in a report by Commissioner Herring.

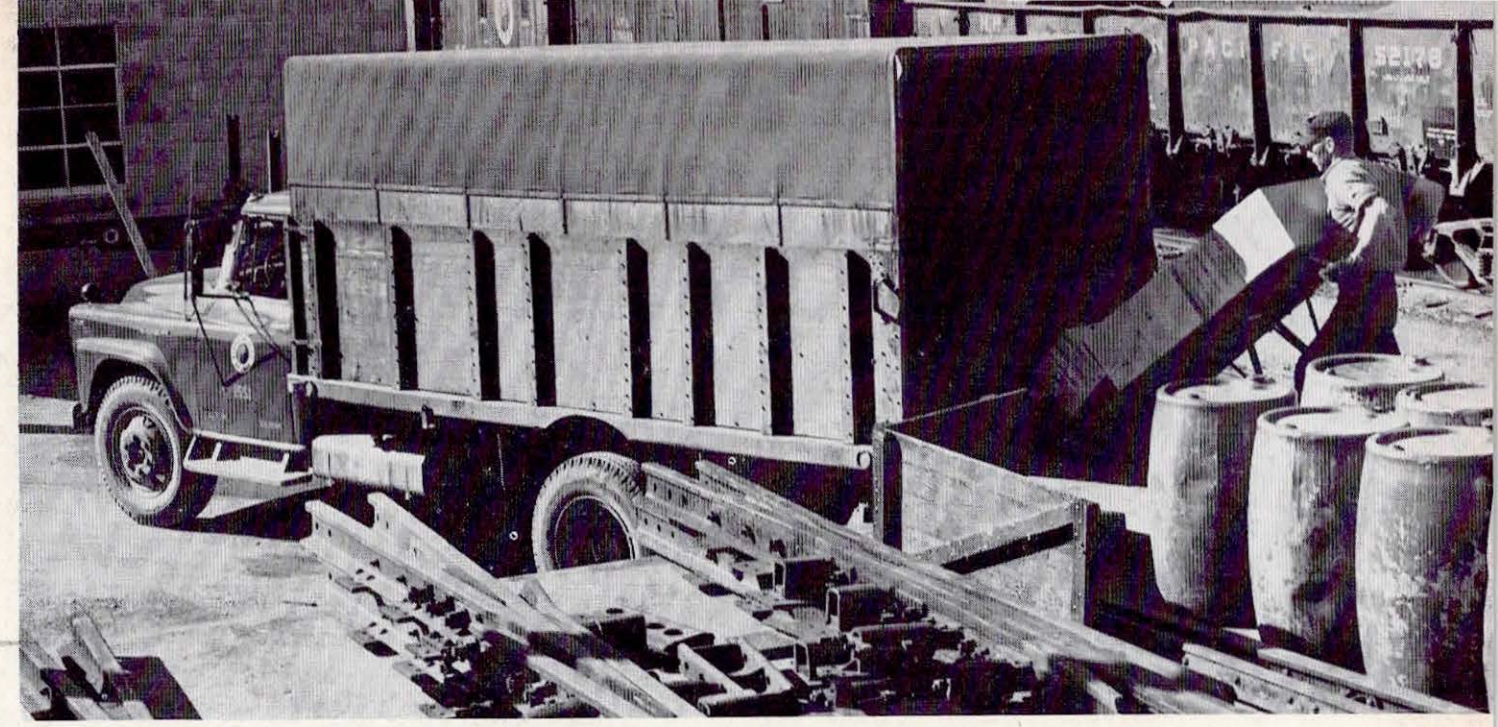
THE WATER-COMPETITIVE CASE, No. 33559, involves eastbound transcontinental rates on brandy, which have been in effect more than a year. The railroads contended that the rates were designed to prevent diversion of the traffic to private trucks, not to compete with water carriers. But the proceeding became a water-competitive case because the only protestants were intercoastal lines.

THESE RATES were condemned in another Division 2 report, the author of which was not identified. Members of the division, in addition to Commissioner Herring, are Commissioners Freas and Goff. Notations on the reports revealed that Commissioner Freas concurred "in the result" of the decision in No. 33334, and that he dissented in No. 33559.

GENERALLY, both reports found that condemnations of the tariffs in issue were required to conserve carrier revenues and prevent rate wars. Meanwhile, however, there were indications that the decisions were influenced by fair-sharing-of-the-traffic considerations which were supposed to have been outlawed by the 1958 Transportation Act's rate-freedom provision.

THE HERRING REPORT rejected railroad contentions that the assailed ratings were lawful regardless of the effect on truckers, because they produced compensatory rates. The report turned from the anti-umbrella clause to that other language in the rate-freedom provision which calls for "due consideration to the objectives of the national transportation policy." Despite the cost evidence, the division embraced that language as a basis for its condemnation of the ratings—having noted, meanwhile, that losses of the traffic at stake were threatening to drive the protesting truckers out of business.

WITH LIKE REASONING, the other report ordered cancellation of the reduced transcontinental rates on brandy. These rates, too, were found to constitute "a destructive competitive practice in contravention of the national transportation policy." This report also noted that the protesting water carriers offered, as a quid pro quo, the cancellation of the latest reduction in their rates. "We shall expect them to effect such cancellation," the report added.



SUPPLY TRUCK is shown being loaded with stores material at Jamestown, N.D.

NP Cuts Costs With A 'Traveling Store'

A new wrinkle in material handling is saving money on the Northern Pacific's Fargo division. It involves use of a truck as a "traveling store."

Behind the new development are three factors:

- The use of the truck to deliver frogs to work points, which started about two years ago.
- The recent abandonment of the NP's supply train.
- The closing of one store and the cutting down on materials handled and number of employees at two others on the Fargo division.

As it stands now, NP's store at Jamestown, N.D., ships materal directly to all points on the Fargo division by means of the "traveling store" truck.

The vehicle, an International truck with an hydraulic hoist, has a removable van top made of canvas with an iron frame. The truck bed was lengthened to 15 feet from 14 feet, so that it can carry any kind of material, in any kind of weather, including a No. 20 frog.

Frog deliveries are made as they have been from the beginning—by special trip to the work point—although a new feature has been added. The truck now delivers new or reclaimed frogs and also picks up bad order frogs for reclamation.

Under the present procedure, an entire frog changeout can be made "in one hour, as compared to a half-day under former methods," according to D. S. Smith, division storekeeper at Jamestown. "With an average truck cost per mile of six cents, excluding chauffeur's wages, frog delivery and pickup has been made under all weather conditions and has proved to be entirely satisfactory," Mr. Smith says.

Before the truck-frog method was instituted, a flat car and three days' time were involved in frog changeouts.

But it's the truck's new function—that of "traveling store"—which marks the new wrinkle in material handling: In addition to making frog deliveries and pick-ups, the truck now makes regularly scheduled runs from Jamestown over the entire division, disbursing stores materials and picking up materials to be returned to Jamestown.

The truck follows a regular schedule of runs beginning the first of February, May, August and November, and continuing for the first two weeks of each of these periods. The chauffeur acts as a traveling storekeeper, disbursing materials, picking up requisitions and relaying some materials back to Jamestown.

Supplementing the truck operation is a system of set-out cars. Three such cars, pre-loaded and pre-tagged with all material ordered for the current quarter delivery, are spotted at Mandan, Dickinson and Dilworth, N.D., former stores locations on the Fargo division.

D. S. SMITH (right), division storekeeper at Jamestown, confers with H. W. Hunt, chauffeur of the "traveling store" before latter begins a run.

In addition to material carried in the truck from Jamestown, the truck driver also picks up material from the set-out cars and drops off bad order tools, empty containers and surplus materials. The average run between set-out cars, where the driver will lay over, is 150 miles or one work day.

The Fargo division's stores facility services 184 points with the truck in eight working days each quarter—56 sections, 120 stations, four B&B crews, two roundhouses and two car shops.

According to E. L. Jensen, general storekeeper, the truck operation has proved to be entirely satisfactory, is presently being expanded to include the Lake Superior and Idaho division, and soon will include the entire NP system.

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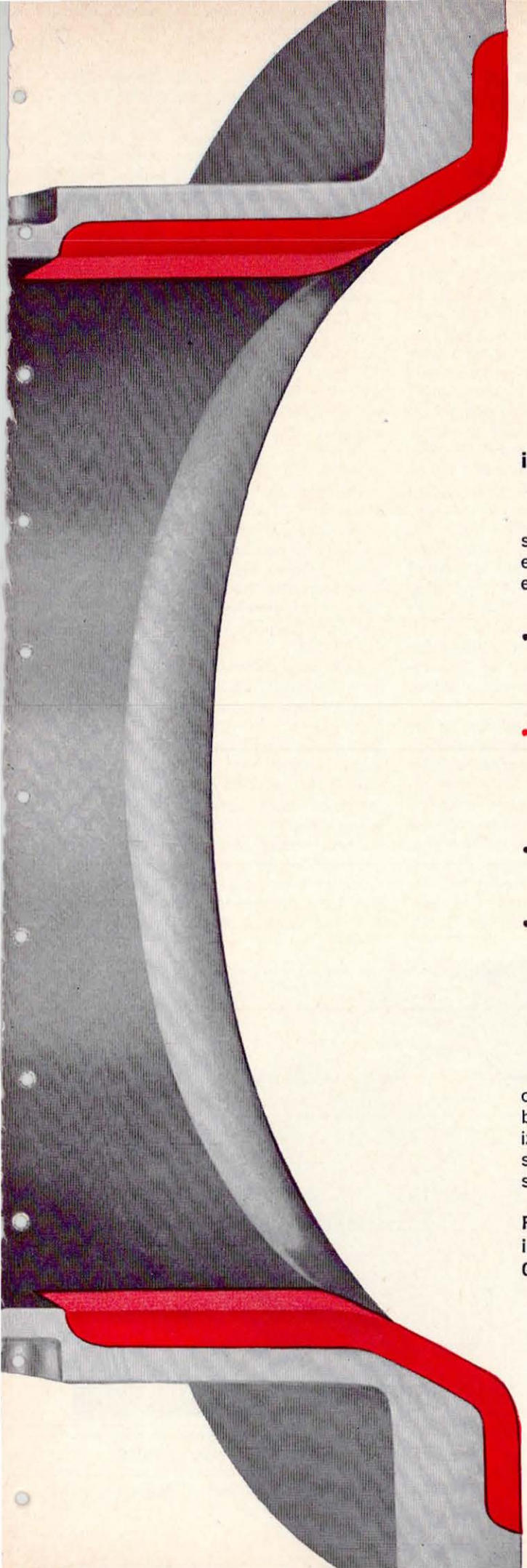

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- **Full flange lubrication is provided by four felt flange lubricators which gather and transmit oil to the flange face. Lateral movement of the axle or traction motor automatically applies the correct amount of oil to the wheel or gear hub.**

- Reduced oil consumption is the result of a narrow window opening which virtually eliminates splash loss.

- Increased bearing capacity is made possible by thirty-three square inches of bearing surface added to the new unit, and movement of the window out of the lower load zone for extra bearing area and support.

NEW ELECTRO-MOTIVE CONVERSION PLAN

Now you can trade in worn traction motor support bearings and other brass scrap on new Electro-Motive flange-lubricated bearings by taking advantage of EMD's new conversion plan. The plan utilizes a straight weight conversion of worn bearings or equivalent scrap brass for new Electro-Motive flange lubricated traction motor support bearings at no increase in cost.

For complete information on the new EMD traction motor support bearing and bearing conversion plan, write Electro-Motive Division, La Grange, Illinois, or contact your nearby Electro-Motive Representative.

GENERAL MOTORS LOCOMOTIVES

QUALITY TO DISCRIMINATING RAILROADS EVERYWHERE

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS · LA GRANGE, ILLINOIS
HOME OF THE DIESEL LOCOMOTIVE
In Canada: General Motors Diesel Limited, London, Ontario.

What RRs Do to Stop Diesel Engine Sparks

► **The Story at a Glance: Trackside fires, frequently caused by locomotive exhaust sparks, also occur because of carelessness with fusees and smoking materials, improper handling of hotboxes, and sparks from brake shoes. The Locomotive Maintenance Officers Association came to those conclusions following three years of study by its Committee on Fuel and Lubricating Oil. Proper maintenance of diesel engines, plus certain mechanical changes, can do much to alleviate exhaust sparking. Correction of the other conditions requires careful supervision and education by transportation officers.**

Many railroads expected the end of steam locomotive operation would also end right-of-way fires. Their expectations were short lived. Diesel locomotives were found to be capable of emitting sparks which could ignite combustible wayside vegetation. Soon railroads again were designing spark arresters and checking for locomotive conditions which could produce dangerous sparking.

There are two possible solutions to the diesel-sparking problem. One would be to eliminate sparking; the other would be to reduce sparking below the danger level. The first alternative is probably not feasible; undoubtedly, diesel engines will always emit some sparks. What is needed is for sparking to be held at safe levels; sparks must not reach the ground while they are still glowing.

The Committee on Fuel and Lubricating Oil of the Locomotive Maintenance Officers Association has placed great emphasis on the shortcomings of diesel maintenance. Its most recent report indicated the following conditions as causes of diesel sparking:

- Malfunctioning of injectors;
- Plugged engine air-intake filters;
- Water leaking into combustion chambers;
- Poor compression and combustion;
- Inorganic additives in lubricating oil;
- High consumption of lubricating oil;
- Prolonged idling periods;
- Low cooling-water temperatures;
- Diesel fuel additives containing ash.

"It is obvious," the LMOA committee reported, "that an engine in good mechanical condition is less apt to cause sparking than one in poor condition." An engine even in good mechanical condition, however, can produce sparks if there are certain additives in the fuel and lubricating oils. Fuel oil that does not burn completely because of the type or quantity of additives represents one possible hazard.

The committee continued: "Lubricating oil additives which tend to form carbon deposits in exhaust passages can cause heavy sparking when the engine is fully loaded for long periods. This carbon breaks up and is emitted from the exhaust stack in a glowing state. The fuel oil problem can be corrected by using a No. 1 diesel fuel or an ashless additive, but considerable research is still necessary to find lubricating oils which do not produce this undesirable condition."

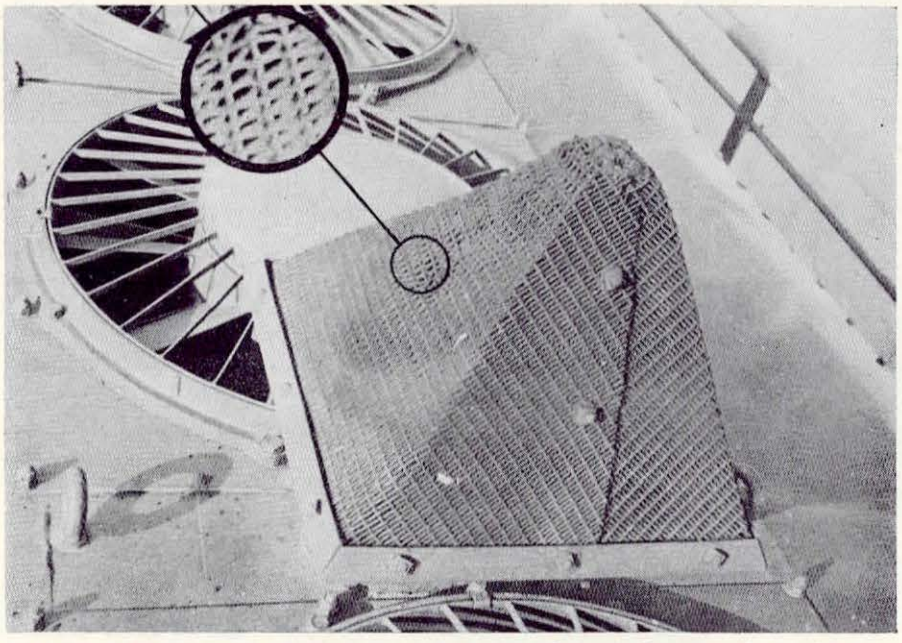
During discussion of additives at the September LMOA meeting, an oil company representative commented that his company's research has shown no relationship between the glow temperatures of locomotive exhaust passage deposits and the debris of calcium-type lubricating oil additives in the deposits. On the other hand, a mechanical officer from one western road stated that "calcium additive in lube oil is one factor in sparking. . . In one of the oils giving us difficulty we reduced the additive level to see if it did have any bearing on this condition, and it did improve the situation. The sparks were finer and they did go out before they reached the ground. It reduced the number of sparks the engine emitted."

Last year the committee commented that "the normal exhaust port temperature range on a diesel engine in good condition is approximately 900 to 1,000 deg F at full load. Any additives that reduce the glow temperature of exhaust passage deposits below this temperature will cause sparking. Normal soot and carbon deposits will ignite at approximately 1,100 deg F, making it necessary that other contaminants be present to lower the temperature at which the deposits will glow."

The LMOA has reported that supercharged diesel engines are not prone to sparking. There is less unburned lubricating oil in the exhaust passages to form carbon. Also, the supercharger itself is an effective device for reducing the size of glowing particles so they will be extinguished before they reach the ground.

Tests have shown that the soft, fluffy carbon deposits on the top of the exhaust stacks or screen-type spark arresters have the lowest glow point. Such deposits will cause sparking when diesel engines are worked at full throttle for periods of one half hour or longer after prolonged periods of idling, or after working at light loads.

Three major locomotive modifications are available to reduce sparking. Spark arresters for diesel locomotives vary from simple wire netting or screen over the exhaust stacks, to elaborate



SPARK ARRESTERS of the netting type can become honeycombed with carbonaceous deposits and, at times, have been found to aggravate sparking.

exhaust manifold modifications.

"The most effective spark arrester for general application is modification of the exhaust manifold," the LMOA committee reported. "This modified manifold swirls the exhaust gases and carbon particles, reducing the temperature of the particles before they are exhausted to the atmosphere."

In conjunction with its burning of residual fuels, the Southern Pacific two years ago reported that, "Screen or netting type spark arresters were investigated. It was thought the netting would pulverize incandescent particles of deposits as they were ejected from the stack. It was found that deposits [were] built up around the periphery of the exhaust stack during extended periods of idling and honeycombed in the openings of the netting. As the load was applied, heat and velocity in the exhaust gases dislodged this material in large pieces. Netting-type spark arresters actually aggravated sparking with some fuels.

"Another disadvantage of a netting-type spark arrester, when designed within the space limitations on the locomotive, was the increase in exhaust back pressure that it created. Subsequent tests developed that any increase in exhaust back pressure adversely affected engine wear in the ring belt area. Exhaust spark emission was finally solved by development of a centrifugal spark arrester."

Conformable oil-control piston rings have also reduced the sparking, because less lubricating oil is carried over into the combustion chamber, reducing carbon formation in the exhaust passages. Needle valve injectors will reduce sparking on General Motors engines, because a finer spray pattern is produced and there is less leakage and dribbling. Poor injection produces inefficient combustion, again resulting in carbon accumulation in the exhaust passages. "Any one of these engine modifications will play an important part in reducing engine sparking," it was concluded.

The committee feels that considerable progress has been made. With the continued help of state forestry departments, locomotive builders, and oil suppliers, the problem will probably eventually be solved.

It is estimated by the LMOA group that only about half the trackside fires actually result from locomotive sparking. Other causes are hotboxes, brake-shoe sparks, carelessness in burning ties, careless use of fusees, carelessness in burning right-of-way vegetation, and carelessness with smoking materials. A number of railroads issue annual instructions to engine and train crews to refrain from throwing lighted cigarettes and cigars, and lighted matches on the right-of-way.

RAILROADING AFTER HOURS WITH JIM LYNE

SHOW WINDOW CONTENTS—There's a strange parallel between an observation of mine here on October 30 about the "show window" function of passenger service—and a St. Louis speech made on October 12 by Warren McNeill, PR director of the L&N. As a newcomer to the railroad business, Mr. McNeill was immediately struck by the insistence of the public on concluding, when they have a "satisfying experience with a railroad's passenger service, that the company is progressive and prosperous"—with exactly the contrary opinion if a travel experience is unhappy.

Rather than run trains that invite criticism, Mr. Mc concludes, it would be better to try to get out of running them at all—even in the few cases where they may be slightly profitable. Any dissent, anybody?

No use in having a show window displaying faded merchandise. Better no show window at all.

UNIQUE AD LETTER—I have received a piece of "junk mail" that is as odd a piece of advertising as I've ever seen—or could even dream of.

It's from a lumber dealer. He says he likes the lumber business all right but, who knows, he might have done better in some other line. For example, he might have bought himself 500 roosters and 500 hens and gone into the egg business. However, he admits he doesn't really know much about the egg business (as his rooster to hen ratio suggests), so maybe he's better off staying in the lumber business. And that's all there is to his letter.

I don't think this is too nutty a piece of advertising either—because, if this fellow's lumber yard were in my neighborhood, I'd certainly take the trouble to walk around just to have a look at the guy.

ADS AND PROGRESS—Speaking of advertising, a recent message in our pages from Union Switch & Signal got me to reading it again and again. The main label said: "Why railroads are a step ahead of the entire transportation industry." The reason cited—railroad ownership and control of their own roadway (usually considered a handicap, in contrast to doing business on public property)—was that railroads have a big competitive advantage, over other forms of transportation, in their ease of application of remote control and automation.

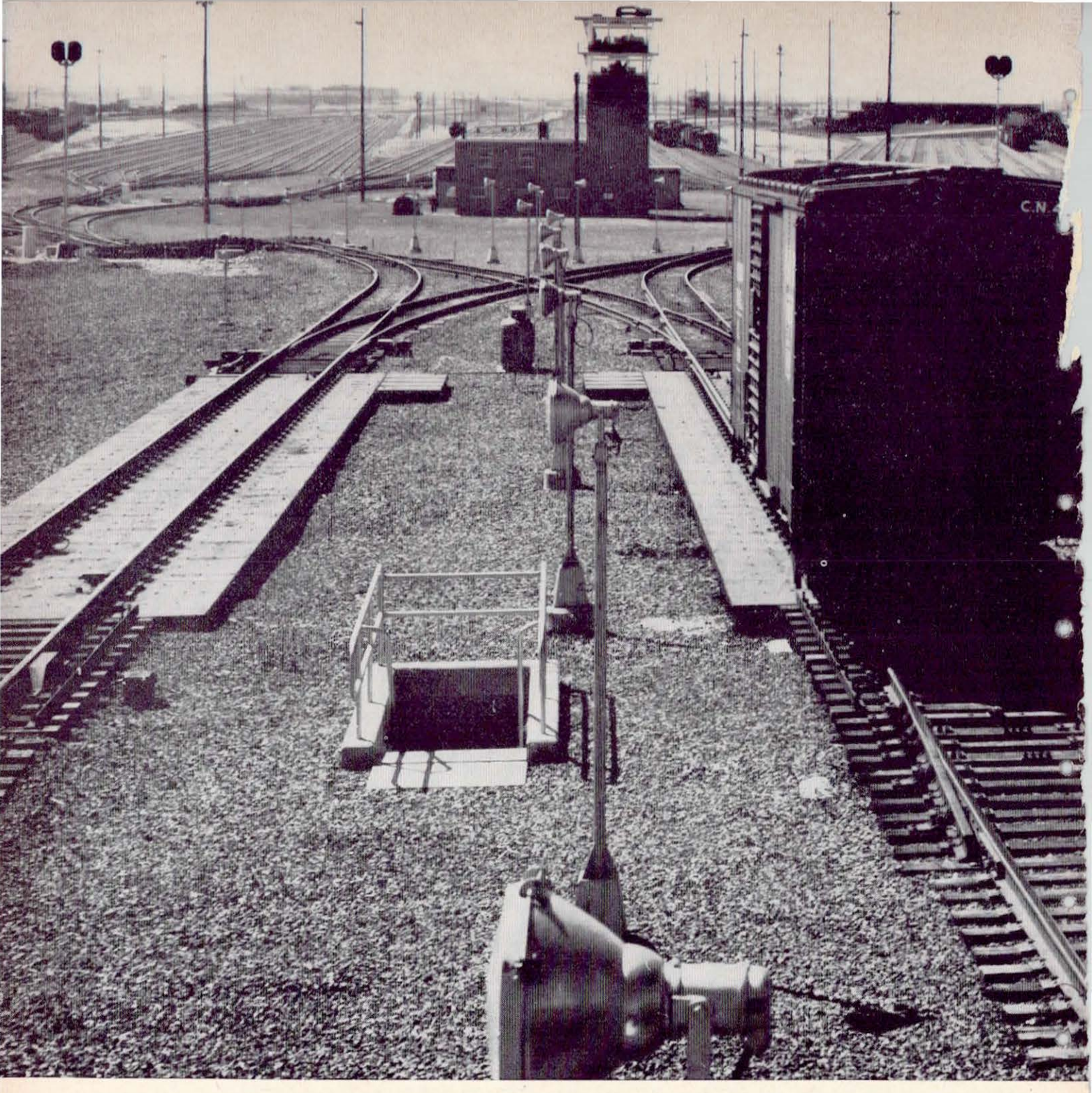
Here is a fertile idea that could induce a flood of productive skull practice on the part of a lot of railroad men—if the suggestion really sinks in.

Throughout the twenties the signal companies hammered away week after week, publicizing their sensible slogan: "Why stop a train to tell it to proceed?" One by one railroad men learned that automatic signaling was not, primarily, a relatively expensive safety device—but a highly profitable aid to improved operation. From this educational program both the railroads and the signal manufacturers gained (not to mention the happy publisher who printed all those fine ads).

There's a lot of so-called "consumer advertising"—e.g., promoting sales of cigarettes, brassieres, autos, shaving cream—which seems to me to be short of vital importance to the public welfare, but that's not the kind of advertising you find in an industry paper. The things railroads do best are usually those things which an alert supplier has found it to his advantage to publicize. Improvements tend to come along much slower in those areas where there is no supplier interest involved and where, consequently, high-powered educational effort is missing.

FLYING 4-CENT MAIL—The P.O. department's transportation counselor, Miss Bea Aitchison, has filed a friendly denial to our suggestion (Oct. 30, p. 39) that Uncle Sam is flying 4-cent mail from Denver to Philadelphia. If there were any such occurrence, she says, it could happen only to a solitary letter which might have dropped into the air mail bag in the sorting process. She's happy to see the railroads realizing that the "bulk mail" offers great opportunities for them and that they're "fixing up the big transfer points to be more efficient and economic."

I regret the inaccuracy as to detail, but the P.O. department is still playing teacher's pet to the airlines so long as it gives them fill-out loads of surface-rates mail to any destination.



New Canadian National yard handles

Up to 7,000 cars speed through Canadian National's new Montreal Yard every 24 hours. Cars are classified in seconds—complete trains assembled in hours. The heart of the operation is a Union Switch & Signal VELAC® Automatic Classification Yard System. It gets cars on the road fast.

With the VELAC system, car movements are controlled automatically . . . from the crest of the hump to the gentle coupling of each car on one of the 124 classification tracks. Automatic radar speed measurements, automatic car weighing, electronic computers, automatic switching and electro-pneumatic car retarders combine to make car classification fast, accurate and safe. Car routing can be entirely pre-programmed or programmed by a control panel operator.

This new yard saves wear and tear on lading and rolling stock. Each car rolls from the last retarder at an electronically determined speed for precise, gentle coupling. Even the most fragile

The Montreal Yard covers more than 850 acres and has 124 classification tracks, 644 switches, receiving and departure yards, car cleaning, diesel repair and storage yards. The main yard is fed from a double hump lead and is equipped with two 58-cylinder master and ten 24-cylinder group electro-pneumatic retarders. The local yard uses one 38-cylinder master and five 24-cylinder electro-pneumatic retarders. The main yard is controlled by dual consoles for simultaneous humping.

7,000 cars daily

ladings are safe. The VELAC system is rugged and gentle. It's built to *set* standards for trouble-free performance and reliability.

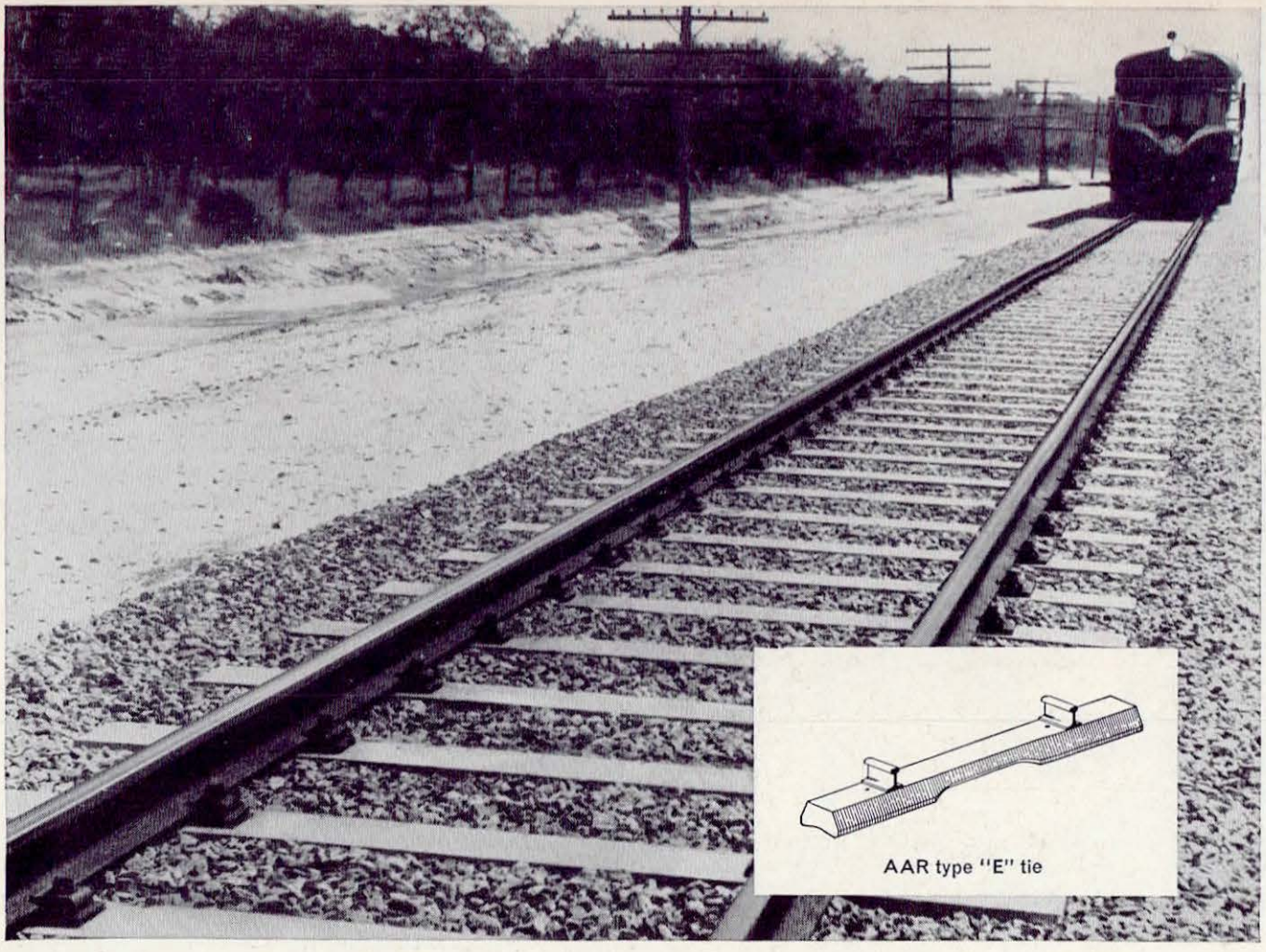
This automatic yard is part of Canadian National's long range capital improvement program, an important step in the development of faster, more efficient, *more completely automatic* traffic handling.

Contact a Union Switch & Signal representative and see how VELAC can work for you.

"Pioneers in Push-Button Science"

UNION SWITCH & SIGNAL
DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY—
SWISSVALE, PENNSYLVANIA

NEW YORK . . . PITTSBURGH . . . CHICAGO . . . SAN FRANCISCO



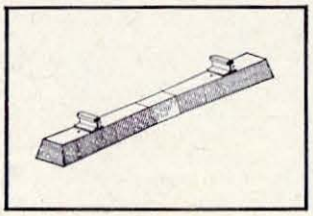
Proved on thousands of miles of European track . . .

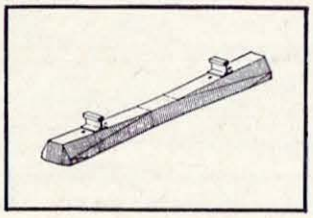
concrete crossties now being service-tested on eight North American railroads

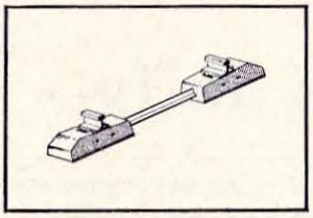
Atlantic Coast Line and Seaboard Air Line were the first U.S. railroads to install trial sections of concrete crossties. Now 6 other U.S. and Canadian Railroads are running trains with new comfort and smoothness over stretches of similar track. Additional test installations are planned by other railroads.

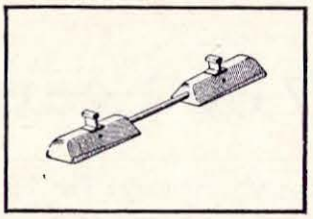
In Europe, concrete crossties are no longer an experiment. A recent investigation in England, Sweden, France and Germany shows wide use of concrete crossties, particularly with welded rails. With concrete ties, wider spacing may be practical. Two concrete ties are given the job of three conventional wood ties. The greater anticipated service life and expected lower upkeep of concrete ties promise big savings in track maintenance. Engineers expect concrete ties to last 50 years or longer.

Write for literature and information on recent installations of concrete crossties. A film is also available. (U.S. and Canada only.)


Gerwick type tie


German B-58 type tie


French R.S. type tie


Swedish 101 type tie

PORTLAND CEMENT ASSOCIATION

Dept. A11b-26, 33 W. Grand Ave., Chicago 10, Illinois

A national organization to improve and extend the uses of concrete

Researchers Meet to Plan Railroad Future

► **The Story at a Glance: Top railroad researchers left their desks and laboratories last week for a two-day get-together. The goal was to take stock of their work, to evaluate the more pressing needs of railroads, and the best ways to meet them. They were taking a fresh look at "where we are, where are we going and how do we get there?" The two-day seminar on research and the nation's railroads was sponsored by the Association of American Railroads and the Armour Research Foundation. It delved into "blue sky" areas of electronic computer utilization as well as "cinder level" problems of better materials, efficient operation and economical maintenance. "Look at the blue sky but keep your feet on the ground" was the advice the researchers heard and heeded.**

Mix methods and materials in the proper way and out will come a miracle —supposedly. But the men on the nation's railroads who are doing the mixing aren't interested in just looking for miracles.

"You don't haul around 650 billion ton miles a year and stop to see what method you're going to use to do it. While we're doing the advance research we've got to do something with what we've got."

The speaker was W. M. Keller, AAR vice president-research, addressing the AAR-Armour Research Foundation seminar on research and the nation's railroads. The meeting brought together some of the outstanding scientific minds in the industry for a look-see at unsolved problems and an examination of the avenues available for their solution.

P. V. Garin, Southern Pacific's manager of mechanical engineering and research, gave the industry researchers something to aim at in providing for future equipment needs. With present diesel fleets getting older, many railroads are facing the time of decision. Should they rebuild in kind, repower present locomotives with higher capacity engines or look for a different type or a radical departure from present designs? Mr. Garin pointed out that some decision must also be made as to the optimum size of the future locomotive. Whatever the individual railroad decides, the industry will see the development of locomotive units with greater hauling capacity, lower ratio of locomotive weight to train handled, a lower weight per horsepower and, at the same time, a reduction in operating and maintenance costs.

Electrification and use of nuclear power in the locomotive of the future must be considered.

"In short," says Mr. Garin, "we have reached a plateau in the development of locomotive design but we have certainly not as yet reached the summit."

Here are a few of the things he sees beyond the plateau:

- Locomotives capable of producing high horsepower and utilizing current from a commercial frequency distribution network. Modern European locomotives develop as high as 6,000 hp per unit and are equipped with silicon rectifiers to convert commercial frequency current to direct current for traction purposes.
- Locomotives utilizing electricity generated at a nuclear plant and transmitted at commercial frequency through an overhead wire.
- An alternating current drive with frequency changers.

New designs in passenger cars will depend on future demands for rail transportation. There will be more functional, mass-produced equipment that will be less expensive to purchase, operate and maintain.

Freight cars must be designed with a lower tare weight to cope with the trend toward heavier loading. The challenge to the designers of the freight car of the future is to reduce dead weight and increase pay load. More effort is needed to improve component design such as trucks and spring suspension to meet these requirements.

What can research do to improve track and roadbed maintenance? R. H. Beeder, chief engineer, Santa Fe, wants a more realistic method to establish durability of ballast material. Mr. Beeder pointed to the annual expenditure by Class I railroads of $23,800,000 for ballast. He said that is reason enough to discard the practice of purchasing ballast available from a source directly on the purchasing line and is justification for adopting the most reliable specification for ballast that is possible. "Surely such sums justify more ballast research than we have been doing."

Within the next dozen years Mr. Beeder sees the need for improvements in the control and regulating devices used with production-type tampers and track lining machines; improved techniques in treatment of ties and timber; use of ultrasonic vibrations in increasing impregnation of wood by toxic materials; the need to determine materials and techniques which will produce fireproof or fire-resistant wood products.

He said more research is needed on rail. Improved metallurgical characteristics are needed, especially for conditions of heavy wear on sharp curves. Also needed are mobile welding plants that will weld rail in track as joint bars are removed.

No discussion of railroad problems can overlook the area of freight loss and damage and its prevention. D. W. McBride, Union Pacific's superintendent of loss and damage prevention, asked for a more scientific approach to technical problems as a supplement to the many preventive programs in use.

Here's what he thinks research can

Railroad Industry Signaling Needs

- A signal lamp bulb that will function throughout its life expectancy without premature burn-outs.
- An economic block signal system on light traffic lines assuring that, when a train passes out of a block, the train is complete and that no parts have been left on the main track to the rear of the movement. This is to be done without continuous track circuits.
- A method of bonding rail joints to permit passage of track circuit energy that will last as long as the rail remains in track.
- A lightning arrester with fast ionizing characteristics coupled with quick restoring features adaptable to signaling needs.—*A. L. Essman, chief signal engineer, system, Burlington Lines.*

do to help reduce the ratio of claim payments to net operating income—approximately 19% in 1960:

- Minimize damage to equipment and lading by providing increased cushioning capacities for freight cars.
- Obtain information on damaging frequencies in vertical, horizontal and lateral planes during impact and over-the-road transport so that indices for lading damage can subsequently be established.
- Standardize testing procedures for obtaining data for determination of forces involved between differently equipped cars with various types of lading, whether in striking or struck positions and in combinations.
- Obtain additional data on magnitude of dynamic compressive forces on various types of lading and/or bracings used for normal load applications.
- Develop better instrumentation for conventional impact and transportation testing for practical field activities.
- Provide more know-how in developing packaging and cushioning materials under dynamic loading.
- Develop equipment to more nearly duplicate factors inherent in transportation rather than that which only develops comparative data.
- Establish limiting values for cross members and end fittings in specially equipped cars to overcome deformation and failure.
- Establish better maintenance and change-out procedures for worn parts that aggravate physical conditions at low velocity couplings.

Mr. McBride added that sufficient research effort will permit standardization of activities and better opportunity to educate railroad personnel in application of proper practices . . . all to the end of reducing freight-claim payout.

T. W. Wigton, general superintendent, communications, Burlington, sees in the communication department an ideal opportunity to assist management in improving railroad operation and increasing efficiency.

According to Mr. Wigton, present telegraph and teleprinter networks should be largely supplanted by direct document transmission at relatively high speed with equipment far less complex than the relatively cumbersome and slow facsimile machines now being used on a limited basis. Each major office would have its own machine and a system of selecting any other major office for speedy transmission of such things as hard copy messages, blue prints, cost figures, waybills, and wheel reports.

Economics is all that prevents universal adoption of direct distance dialing on all roads.

The hypothetical system would transmit information over standard telephone channels with 300 to 3500 cycle bandwidths. The correct number of channels could be drawn on from a bank of voice channels through the direct distance dialing equipment.

Two-way radio communication will also come in for improvement. VHF radio expectant average failures should not occur oftener than once every five years—an improvement factor of 10 to 1, based on the present rate of periodic inspections and checks. This improvement must be made without adding complex circuits to a radio unit. Power supply still ranks as the most unreliable unit despite replacement of vibrators, dynamotors and rectifier tubes with transistors, silicon rectifiers and zener diodes.

Also meriting further exploration: a central rate checking bureau from which current tariff information could be sent directly to local agents faster and more accurately.

Solution of materials problems within the railroad industry will require clear understanding of service requirements, plus imagination in materials selection, fabrication and design concepts.

C. R. Simcoe, supervisor alloy department, Armour Research Foundation, warned that mere substitution of a new metal or alloy rarely makes enough use of the full advantages available from the new material. "New materials nearly always require new design concepts."

Mr. Simcoe said developments in older materials seem to offer solutions in reducing weight and decreasing maintenance. Of primary interest are newer quenched and tempered low-alloy steels and precipitation hardening of stainless steels. A group of clad and surface materials are also of interest for corrosion resistance, wear, oxidation and erosion. A new process finding many new uses is the fluidized bed for heat treating, siliconizing and chromizing. This is a bed of small particles, suspended and in constant motion in a gas stream. The bed can be heated or cooled very rapidly. The gas can be inert or it can react with the material placed in it to provide surface coatings.

Mr. Simcoe believes that both new and older automatic welding processes can find more widespread application, especially with newer materials, such as quenched and tempered structural steel.

Armour Research Foundation scientists N. A. Weil and R. Van Beek presented new information on the minimum weight construction and dynamic analysis of freight cars. Work performed at the Foundation has indicated the utility of prestressing concepts to beam design where high stiffness is required. Results of experimental work, performed on prestressed and segmented beams constructed of ceramic materials, indicate the possible application to rail car construction.

New analytical techniques were developed to study the action of cars during humping operations. The techniques permitted detailed evaluation of motions and stresses occurring in the primary structure of the car during dynamic loading. Theoretical results were found to agree well with experimental observations. Results show that a dynamic analysis can be used to evaluate the performance of a proposed design, or to supplement testing of a prototype.

A. K. Hawkes, Electronic Research Division, ARF, declared that mathematical model simulations are becoming increasingly useful in solving many engineering and econometric problems. Of particular interest to railroad researchers is use of the computer to determine optimum allocation of funds for equipment and right-of-way maintenance, passenger train scheduling and optimum freight routing within system and rate constraints.

Although computers can aid railroads in many ways, Douglas C. Turnbull, Jr., B&O vice president, research and development, said, . . . "If you don't watch out, you will be working for the giant computer." Despite this warning, he called the giant computer "the modern miracle which multiplies man's ability to do mental work and to project ahead: using mathematical models, simulation and other techniques."

Among specific areas where computers can aid railroads, Mr. Turnbull cited purchases and stores with attendant inventory handling, planning and directing freight car and locomotive movements, more rapid and accurate record keeping and financial forecasting by the finance department, market and sales analysis and forecasting, car repairs, piggyback and per diem.

G. M. Magee, director of engineering research, AAR, emphasized the need for accelerated laboratory testing to "make sure you are on the right track. Admitting that it is difficult to duplicate service conditions in accelerated laboratory testing, Mr. Magee feels that carefully considered and planned lab techniques can be invaluable in evaluating new designs, new materials and new processes.

Also calling for more laboratory testing and research, William Van Der Sluys, associate director, R&D, Pullman-Standard, said the trend toward the specialized freight car has increased the need for scientific structural analysis. "If we are to have efficient and economical construction in the increasingly diverse types of freight cars, modern analytical and test techniques are absolutely necessary.

Export Coal Up, Prospects Good

A strong export market, competitive rate making, better coal-carrying equipment, and mergers and diversification are among the reasons cited for an expected near- and long-term increase in coal traffic. Norfolk & Western Vice President—Traffic Robert N. Woodall told the Southern Coal Producers' Association in Roanoke, Va., that a resurgence in coal traffic began in July and has been particularly encouraging in Tidewater tonnage destined for foreign markets.

"Our September net income was the highest in 21 months and the fourth month in a row in which earnings exceeded the corresponding month of 1960. Total September carloadings were 14% above those of the same period last year and our coal loadings increased 13% over September 1960. Our total October loadings were more than 17% over October 1960, while coal loadings increased 18.2%," Mr. Woodall reported. He attributed these increases partly to a strong export market for coal.

"The principal reason for this," he continued, "is the rapid growth of the steel industries in several countries—the leading ones being Japan, Italy, West Germany, Argentina and Brazil.

"In 1960," he pointed out, "U. S. coal shipped to Japan amounted to 5.6 million tons of which 99.5% moved through the Port of Hampton Roads. . . . On the basis of the best information available, it appears that by 1970 as much as 15 million tons of U. S. coal could be moving annually to Japan.

"Italy is our second largest single market for American coal. The Italians used 4.8 million tons of our coal in 1960 and 4.7 million moved through Hampton Roads. . . .

"In 1960 Germany and Holland combined imported a total of around 7.3 million tons of American coal, 94.4% via Hampton Roads. The Germans increased their duty-free quota of coal for 1961 by around a million tons, which should be of substantial assistance to the movement of American coal to that country.

"More than two million tons of American coal were exported to South America last year," Mr. Woodall continued. "Most in demand are the high-grade bituminous coking coals which come from producers in your association. Obviously, you are going to continue to share in this export market at an even greater rate.

"We also believe that the movement of 'coastwise coal' to New England, Baltimore, Philadelphia, and New York through the Port of Hampton Roads is going to increase, particularly since our own American firms are building larger vessels to handle this traffic.

Mr. Woodall also pointed out that N&W is "participating in substantial coal rate reductions to destinations in New England, the Midwest and the Southeast. These reductions have held business which might otherwise have been lost by the railroads and the coal operators. . . ."

Mr. Woodall outlined how the N&W is preparing itself to handle its growing coal volume.

"We are anticipating your needs with larger, stronger cars capable of delivering more tonnage in less turnaround time, with less possibility of bad order because of mechanical failures. Only a month ago, we announced our order for a third lot of one thousand of the new 85-ton roller-bearing hopper cars which we introduced in August 1960. . . .

"On a national basis," Mr. Woodall said, "in 1960 the railroads transported nearly 303 million tons—about 73%—of total coal production. Our industry has more than $3 billion invested in coal transportation facilities. In 1960, the N&W originated 58 million tons of coal traffic and handled an additional three million from connections, and also received 71% of its freight revenues from these sources. . . . Our investment in coal hopper cars alone, in terms of today's prices, amounts to more than $650 million.

"In the last five years," he continued, "the Norfolk & Western has acquired an entirely new fleet of 561 modern locomotives. These enable us to operate coal trains more than 200 cars long on a routine basis."

Mr. Woodall then outlined other N&W improvements that have facilitated coal shipment:

- Greatly improved signalling and communication equipment.
- Expansion of centralized traffic control.
- Electronic freight classification yards.
- Expansion of the Lamberts Point unloading facilities at Norfolk.

Mr. Woodall contended that N&W's proposed merger with the Nickel Plate, lease and eventual acquisition of the Wabash, and purchase of the Pennsylvania's Sandusky Line "could offer great efficiencies in the movement of your coal."

He said: "The system we propose would relate principally to westbound movement of coal, and would afford direct access to many important producers of steel, as well as electrical utilities and other industrial consumers."

Diversification into other forms of transportation is another direction in which N&W is moving, Mr. Woodall reported. "We will begin hearings in Washington before the Interstate Commerce Commission on Dec. 5 on an application filed jointly by the N&W and the C&O to purchase a coal-hauling barge line operating on the Ohio River."

New Solution Sparks Coal Pipeline

Texas Eastern Transmission Corp. and Consolidation Coal Co. say they will be moving between five and ten million tons of coal a year via a 350-mile pipeline by 1964. The two companies say they will share an estimated $100-million construction cost equally.

The announcement followed a demonstration of the instantaneous burning of a solution of coal and water—"slurry"—at South Amboy, N. J., last week. A mixture of 70% coal and 30% water was used in the demonstration. Such a mixture can be transmitted by pipeline as 60% coal and 40% water. It drains easily to the 70-30 solution when allowed to stand in regular storage tanks. In the past, coal moving by pipeline has been a 50-50 solution, which needs expensive filtering and drying before it can be burned.

The two companies hope their proposed pipeline from the mines of West Virginia and western Pennsylvania will begin by serving from six to nine electric utilities situated between Philadelphia and New York.

...The strength of an industry is measured by those who serve it.

those who serve—

This is the team of railroad suppliers who are *serving* America's Railroads—not merely selling to them.

The Adams & Westlake Co.
Aeroquip Corporation
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Holland Company
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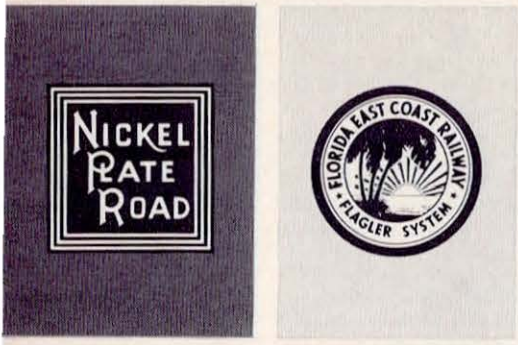
"What you *do* shouts so loudly, I cannot hear what you *say*."

A man may believe strongly in an ideal—but unless he is willing to give part of himself to it, the ideal doesn't become a part of him.

We urge every railroad supplier to *act* in the interests of American Railroads.



70 Railroads declare cold war on the hot box

70 railroads are spearheading the switch that's routing the hot box problem. They're going "Roller Freight"—solving the problem by eliminating the cause. The 70 railroads and 41 other freight car owners now have over 83,000 cars on Timken® tapered roller bearings in service or on order. Two out of three new cars ordered in 1960 were on roller bearings. And leading the way are Timken tapered roller bearings, the railroad bearing of proved performance.

With cars on Timken tapered roller bearings, freight trains can roll at high speeds, stick to schedules, give shippers better service than ever. Cars on Timken bearings are averaging more than a hundred million miles between car setouts caused by overheated bearings. That's because Timken bearings roll the load instead of sliding it.

Now's the time to make the switch. When all freight is "Roller Freight" the railroads will save an estimated $288,000,000 annually in operating and maintenance costs—about $144 per car—based on the Timken Company study, "The Use of Roller Bearings on Freight Cars—An Economic Study". And they'll be in a position to win more business with the best service ever. Write for information. The Timken Roller Bearing Company, Canton 6, Ohio.

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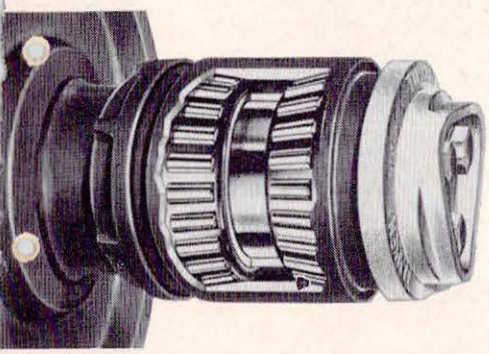

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PACIFIC GREAT EASTERN RLY.

Williams Succeeds Deramus on Katy

WILLIAMS

DERAMUS

Charles T. Williams, formerly executive vice president, Katy, has been elected president of that road, succeeding William N. Deramus, III, who resigned. Mr. Williams, who joined the Katy as agent - telegrapher in 1934, took over the presidency on Nov. 2, his 51st birthday. He came to the Katy following five years service on the former Chicago & Alton—now the Gulf, Mobile & Ohio. In 1955 he was appointed vice president and general manager and earlier this year was named excutive vice president.

W. N. Deramus III leaves the Katy to become president of the Kansas City Southern and Louisiana & Arkansas, in a move that reunites a famous father and son combination. The elder Mr. Deramus, who resigned as president of both the KCS and L&A to be succeeded by his son, will continue as chairman of the board and of the executive committee of both companies.

The 46-year-old William N. Deramus III will continue as chairman of the board and a director of Mid-America Pipeline Company. He has served as president of the Katy since 1957 and as president of the Chicago Great Western from 1949 to 1957.

Murray Hits Public 'Apathy'

"Are we so far down the road toward the welfare state that the average citizen is not shocked by the prospect of nationalization, or is indifferent to the significance of it?"

The question was posed last week by Soo Line President L. H. Murray. Addressing the Shawano (Wis.) Area Chamber of Commerce, he noted that the railroad industry for years has been urging local, state and national governments to adopt sound transportation policies to ward off the threat of nationalization. But, he said, the public either hasn't listened or doesn't care.

"More and more," said Mr. Murray, "we submit to the so-called welfare state and compound the invasion of our private enterprise system by government in numerous areas of activity. A great mass of our people have virtually reached the point where they are psychologically ready for the government to be our 'see-all' and 'cure-all' saviour. Many of our people can scarcely conceive of any solution to a major economic problem except to run to the government with a demand that it take over the activity.

"The increasing failure to appreciate how free enterprise has contributed to our high standard of living and industrial strength has become a major deterrent to arousing public support for the adoption of sound transportation policies in this country. It will take courage and determination on the part of political leaders to allow railroads to function as true members of the private enterprise system, subject only to such regulation as is just and reasonable. But if the public is apathetic to the dangers of nationalized railroads, we scarcely can expect any sound progress toward averting nationalization."

Where government has assumed ownership of railroads, said Mr. Murray, the result has been a "financial catastrophe" both to the state and its taxpayers. He said French taxpayers are making up a deficit of $400 million a year incurred by the state-owned railroads. And American taxpayers, he said, paid $1.6 billion in taxes to cover the costs of government operation of railroads for 26 months at the time of World War I.

"Primarily, our private enterprise system brought about our nation's economic strength," said Mr. Murray. "Only by remembering this, and by being determined to preserve our system, can we halt the continual steps in the direction of nationalization that we are taking under the mistaken impression that we are providing for the 'general welfare.' "

ASME Sessions Include Fuel, Railroad Papers

Nine papers will be presented at the railroad sessions, Nov. 29-30, of the winter annual meeting of the American Society of Mechanical Engineers. At a fuels session, Nov. 27, three papers will be presented on the Thawing of Frozen Coal in Railroad Cars. The ASME meeting is set for New York's Statler Hilton Hotel, Nov. 26-Dec. 1.

Railroad papers slated for Wednesday, Nov. 29, include Progress in Railway Mechanical Engineering 1960-61, by D. R. Meier, of General Electric Co.; Unusual Ventilating System Characterizes General Electric's New 2,500-hp Diesel-Electric Locomotive, by J. C. Aydelott, of G-E; and A Comprehensive Engine Cooling System for Diesel Electric Locomotives, by Mr. Aydelott and W. W. Peters, also of G-E.

Thursday morning's program, Nov. 30, includes Relation of Wheel-Tread Wear and Brake-Shoe Wear, by J. R. Jennings, of Wilson Car Lines; Freight-Car Center-Plate Lubrication, by W. H. Cyr, of the Canadian National; and Design and Testing of a Self-Supporting Aluminum-Covered Hopper Car, by R. A. Campbell, Alcan International Ltd., Montreal, and I. H. Jenks, Aluminum Labs. Ltd., Kingston, Ont.

Thursday afternoon's program includes The Barber Cushion Tube, by R. C. Williams, Standard Car Truck Co., and S. G. Guins, of the Chesapeake & Ohio; The Design of Cushioning Gears for Rail Car Applications, by R. L. Hassenauer, General American Transportation Corp., and G. E. Novak; and British Railways Experimental Brake Van (Caboose), by B. T. Scales, British Transport Commission.

The fuels papers will include Electric Infrared Railroad-Coal Car Thawing Installation, by J. J. Bosl, Cleveland Electric Illuminating Co.; Thawing Coal in Railway Cars, by F. B. Manning and Emil Szaks, C&O; Coal-Car Thawing With Gas Infrared and Oil-Fired Units, by T. C. Sparks, Toledo, Lorain Fairport Co., and H. L. Zouck, Baltimore & Ohio.

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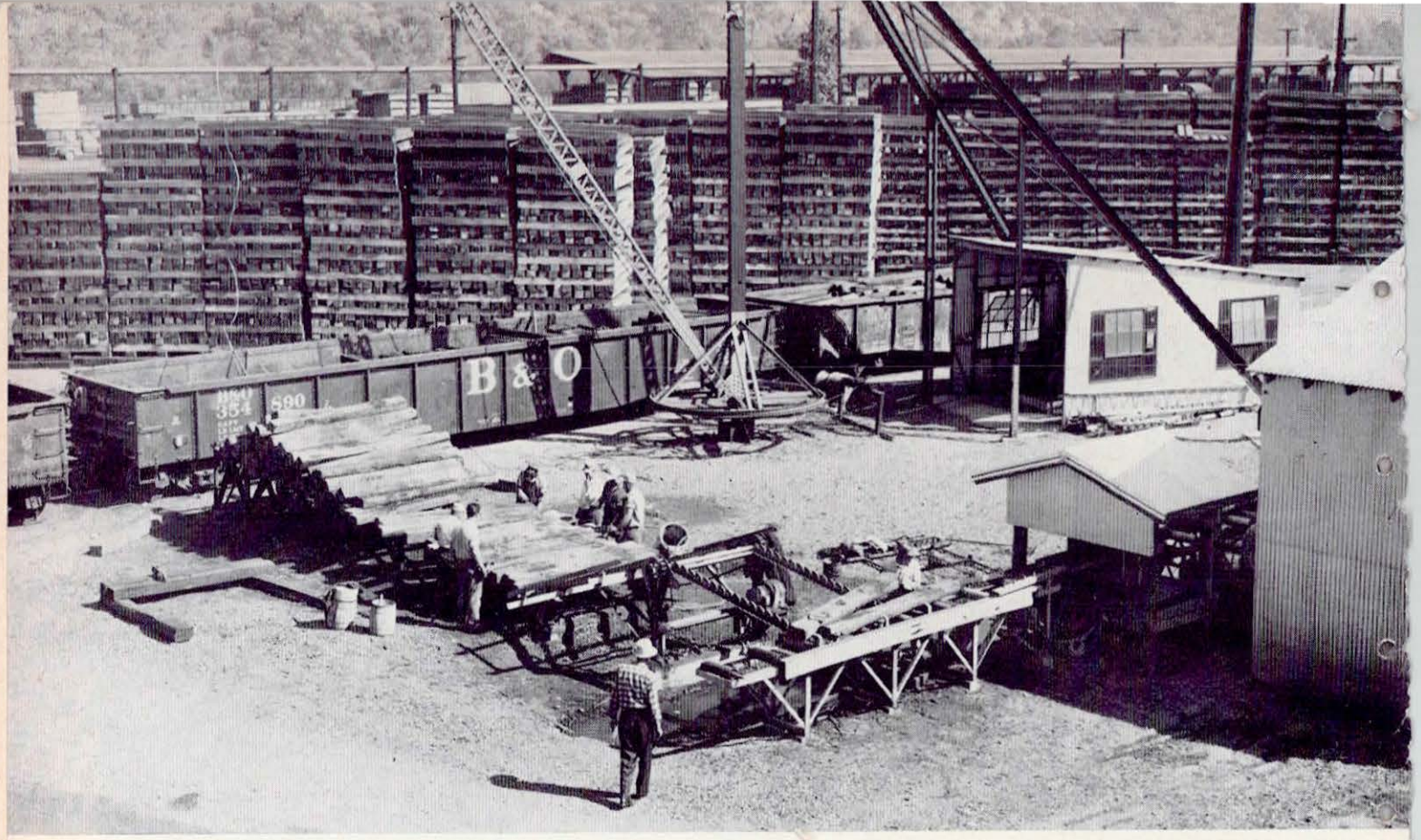

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How the B&O Treats and Re-Use

The Baltimore & Ohio is engaged in a program to re-treat, for further use, a large proportion of the millions of crossties it plans to salvage from abandoned tracks during the next 10 years. The objective is more than to make the used tie perform like a new tie—it must also look like a new tie. A re-treated tie is charged out to division engineers at $1.25, whereas a new tie of the same grade would be charged out at $4.22.

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Over the past quarter century the Baltimore & Ohio has maintained an average of 10,378 miles of track. Installation of centralized traffic control and abandonment of non-revenue-producing lines will, over the next 10 years, eliminate 2,000 to 2,500 miles of this track. In round figures, this means some 6,000,000 to 7,500,000 crossties of varying age will be salvaged.

To our knowledge, no information was, or is, available from experience on just what service life can be expected from a re-used crosstie. Obviously, considering their age and condition, many of our ties are salvageable and many others are, for our purposes, worthless.

Because they can be corrected, we ignored physical changes in the tie acquired in service such as plate cuts, splitting, checking, spike holes, and ballast gouging. These changes certainly affect the looks of the ties but not necessarily their re-usability.

The assumption was made, perhaps optimistically, that, providing the wood is sound, the tie removed from track has the potential life of a new crosstie regardless of the age already acquired in service. No difference should be expected in the anticipated life of properly preserved, sound new wood and properly preserved, sound old wood.

It is reasonable to assume, however, that a sound treated tie removed from its original track location is analogous to a sound treated utility pole removed and re-used in a different location. The original life expectancy does not materialize in the displaced material. Taking a cue from this, we decided to re-treat all sound ties recovered from track abandonment. We then went a step further and decided that, in addition to making the used tie perform like a new tie, we would make it look like one.

Our brief experience in the way of refurbishing had convinced us that, in order to get not only proper use but, on occasions, any use at all, a psychological block on the part of the ultimate user had to be overcome. The used tie received by the roadmaster from the abandonment area appeared to him no better than the ties he was removing in normal maintenance work from his own track area. In spite of instructions and stipulations pertaining to their installation, it was obvious that many sound, re-usable ties were finding their way into the burning pile after

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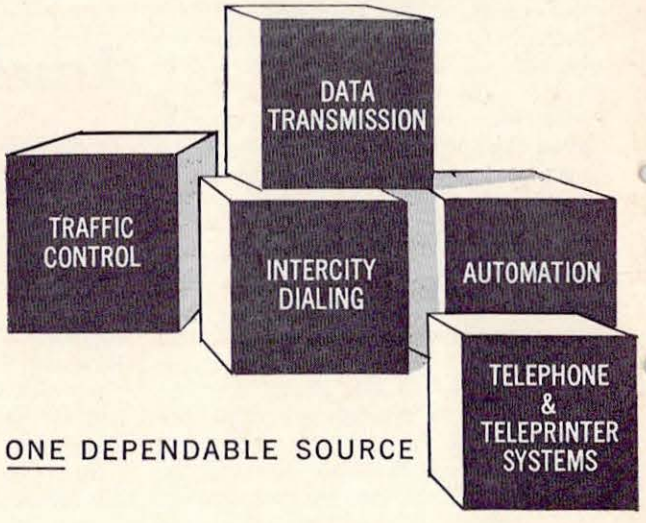

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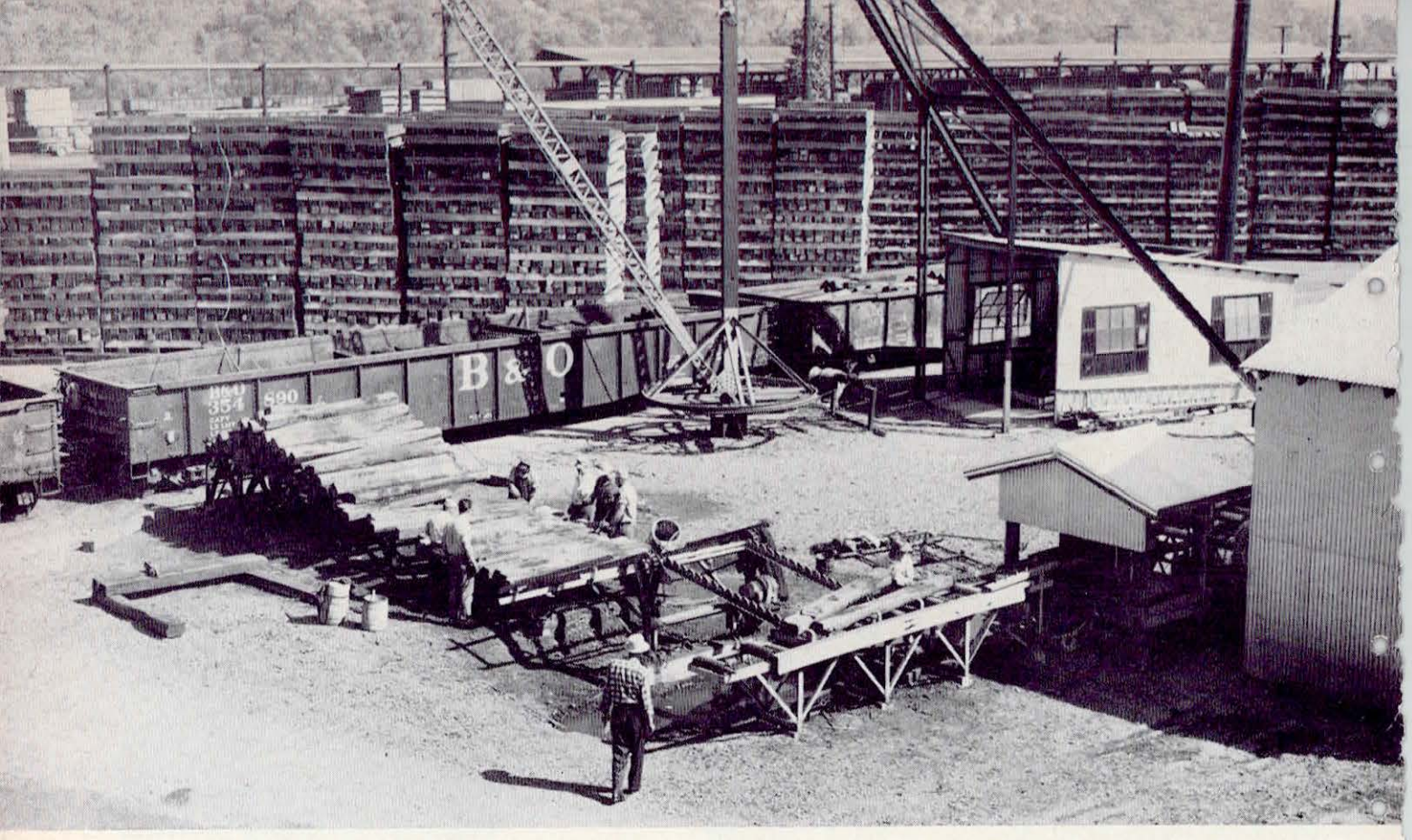

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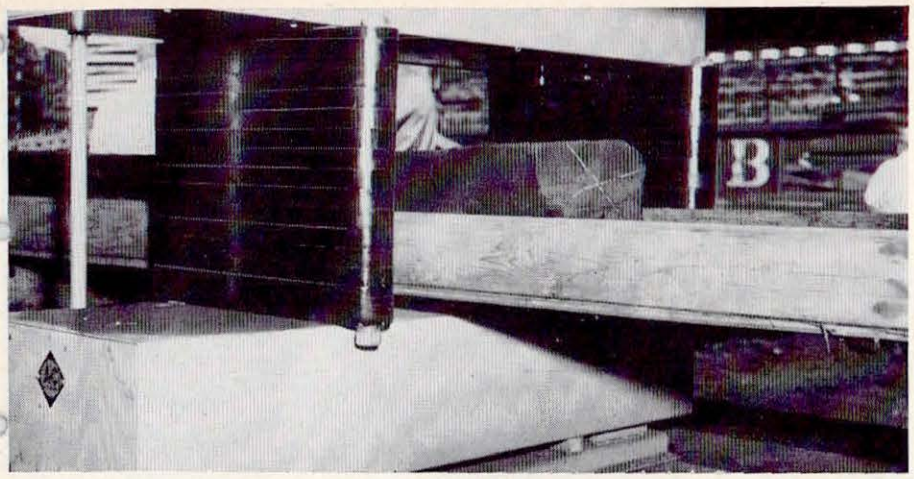
To our knowledge, no information was, or is, available from experience on just what service life can be expected from a re-used crosstie. Obviously, considering their age and condition, many of our ties are salvageable and many others are, for our purposes, worthless.

Because they can be corrected, we ignored physical changes in the tie acquired in service such as plate cuts, splitting, checking, spike holes, and ballast gouging. These changes certainly affect the looks of the ties but not necessarily their re-usability.

The assumption was made, perhaps optimistically, that, providing the wood is sound, the tie removed from track has the potential life of a new crosstie regardless of the age already acquired in service. No difference should be expected in the anticipated life of properly preserved, sound new wood and properly preserved, sound old wood.

It is reasonable to assume, however, that a sound treated tie removed from its original track location is analogous to a sound treated utility pole removed and re-used in a different location. The original life expectancy does not materialize in the displaced material. Taking a cue from this, we decided to re-treat all sound ties recovered from track abandonment. We then went a step further and decided that, in addition to making the used tie perform like a new tie, we would make it look like one.

Our brief experience in the way of refurbishing had convinced us that, in order to get not only proper use but, on occasions, any use at all, a psychological block on the part of the ultimate user had to be overcome. The used tie received by the roadmaster from the abandonment area appeared to him no better than the ties he was removing in normal maintenance work from his own track area. In spite of instructions and stipulations pertaining to their installation, it was obvious that many sound, re-usable ties were finding their way into the burning pile after



ELECTRONIC metal detector locates broken spikes in ties as they move on production-line conveyor.

WATER SPRAY, operating at 150-lb pressure, thoroughly cleans ties as they move to adzing and boring mill.

ts Old Crossties

having been loaded possibly hundreds of miles away, hauled to the re-use location and unloaded. This made expensive firewood and was defeating our purpose. The slight additional expense to which we now go in giving this tie a new-tie appearance has been more than compensated for in their enthusiastic acceptance and total use.

Program Has Economic Aspects

This reclaiming program has its economic aspects. These will not be discussed here other than to state that our division engineers are more than pleased to get a tie which in appearance looks new, acts new when being installed, and, they believe, will perform like new. This tie is charged out to them at $1.25; the cost is actually slightly below this figure. The same grade new tie is charged at $4.22.

Add to each an installation cost of $1.90 and arrive at whatever conclusion you wish. We like it.

Management gives its approval to proceed with the abandonment of a specified number of miles of track. Generally speaking, this will be in a double-track area, permitting regular track equipment to be utilized in the demolishing work. A Power Jack raises the track slightly, loosening the ties from the ballast. Bolt machines, spike pullers, etc., loosen and disconnect the rails, bars and plates.

Following their removal, a spotter marks those ties that are unfit for reclaiming. This is done by applying a set of negative specifications based on the premise that it is easier to select ties that could not be reclaimed as opposed to those meeting minimum acceptable requirements. The eight rules used as a guide are: (1) Rail seat rotten within; (2) other evidence of internal or external rot; (2) 7-in. tie—plate-cut over ¾ in. with very rough back; (4) 6-in. tie—plate-cut over ½ in. with very rough back; (5) split half way through rail seat; (6) center-bound break; (7) badly shattered, and (8) deep checks—one-half depth of tie.

Such ties are marked as unfit for reclaiming and are pulled from the roadbed for local disposal. A fork lift loads all remaining ties to open cars for shipment to the treating plant for reclamation. At present, this re-treating is being carried out by Koppers Company, Inc., Wood Preserving Division, at B&O's Green Spring (Md.) plant.

On receipt at the plant, the ties are sling unloaded by a stiff-leg derrick to a roller ramp. Trained personnel give the ties a critical inspection for soundness and acceptability for re-use, marking unfit ties for kick-off. Untreated tie plugs are manually driven into spike holes. Moving on a powered conveyor, the ties pass a sensing device which detects broken spikes invisible to the eye. These spikes are driven below the adze cut.

A 150-lb pressure three-angle jet water spray thoroughly cleans the tie as it moves to the adzing and boring mill.

An automatic variable depth adzer permits cutting a level seat for the tie plate with a minimum loss of wood, eliminating in the process any prior plate cuts and also leveling the previously driven tie plugs. Ties are trammed for treating from the A&B outfeed. About 8% of the ties received are being dowelled.

Standard Treating Schedule

Our decision in respect to preservative retention for the reclaimed ties is arbitrary since no assays have been run to determine preservative content of ties of known age removed from track. Several species of wood are represented. This consideration, coupled with the disparity in tie age, suggested that we adopt a standard treating schedule for all charges in the belief that the newer ties would take less preservative and the older would be more receptive. Our aim is an average retention of 4 lb of 70-30 creosote-coal tar solution per cubic foot of wood. We are obtaining slightly in excess of this on a 3-hour, 20-min Rueping treatment cycle.

Using initial air pressure of 90 psi, a preservative drop in temperature of 215 deg, an hour-and-a-half pressure period at 175 psi, followed by an hour vacuum, gives us the retention desired with good penetration.

Recovery percentages of ties removed from track will vary considerably with different locations. Our experiences to date suggest that of the number of ties in abandoned track 60% to 65% will be reclaimed by the aforementioned process, and at least 70% of these will return to use in high-speed heavy-tonnage track. Presently, 30% of our ties from abandonment are being disposed of along the right-of-way. That leaves 70% being returned to the treating plant, where about 10% are being rejected. We expect to reduce this to 5% by a more rigid field inspection. The plant rejects have so far been disposed of by local people hauling them away for personal use. With the saturation of this market, we expect to hog the remainder and use for fuel.

F. B. WHITMAN
PRESIDENT

"Many railroads today are developing and using advanced and improved practices and techniques in different phases of their marketing, maintenance, operations and accounting. Many of these practices vary greatly as between railroads and in any one railroad certain departments may be operating at a much higher level of efficiency than others.

"In my opinion the RAILWAY AGE performs a very useful service in publishing the articles reporting the development and use of these advanced practices and techniques. If railroad officers at appropriate levels will review these articles I am sure their own ideas as to how their own operations and practices can be improved will be greatly stimulated.

"The more that all of us can learn of the best techniques and practices that are being followed on other railroads the better we can do a top-notch job for our own company. Thus, the assistance of the RAILWAY AGE by publicizing these matters makes a most worthwhile contribution to the industry as a whole."

F B Whitman

PEOPLE IN THE NEWS

AMERICAN REFRIGERATOR TRANSIT CO.—**I. A. Thayer,** general agent, Minneapolis, Minn., transferred to Boston, Mass., succeeding the late **L. M. Knowlton. D. Buckley** appointed general agent, Little Rock, Ark., succeeding **J. E. Max,** transferred to Minneapolis.

ATLANTIC COAST LINE.—**R. C. Casey** appointed assistant general freight agent, Miami, Fla. **R. W. Lanier** named district freight agent, Belle Glade, Fla.

BALTIMORE & OHIO.—**L. S. Hartley,** manager of agricultural development, Baltimore, Md., appointed manager of agricultural, livestock and perishable traffic.

BOSTON & MAINE.—**Alburn J. Connell,** director of methods and research, Boston, appointed director of the newly created department of systems and research. **John E. Rourke,** assistant director of research and development, and **Roger M. Lenfest,** assistant superintendent, named assistant directors of the new department.

BURLINGTON.—**G. M. Youhn,** staff officer, labor relations department, appointed director of labor relations, replacing **A. E. Egbers,** named assistant to vice president-operation (labor relations), Chicago.

CANADIAN PACIFIC.—**W. J. Presley,** superintendent, Laurentian division, Montreal, transferred to the Montreal Terminals division, succeeding **Michael Rennie Martin,** who retired Oct. 31. **E. L. Guertin,** assistant superintendent, Smith Falls division, Ottawa, Ont., succeeds Mr. Presley as superintendent, Laurentian division. **J. G. Dow,** assistant superintendent, St. John, N. B., succeeds Mr. Guertin. **J. B. Chabot,** chief dispatcher, Smith Falls division, appointed assistant superintendent of that division, at Smith Falls, Ont., succeeding **W. W. Stinson,** transferred.

W. J. Klyn, deputy auditor of freight revenues, appointed auditor of freight revenues, succeeding **G. C. Brooks,** who retired Oct. 31.

CHESAPEAKE & OHIO.—**Dr. R. R. Brandon** appointed chief medical examiner, system, succeeding **Dr. J. J. Brandabur,** who retired Oct. 31. Abolished position of assistant to chief medical examiner, formerly held by Dr. Brandon.

ELGIN, JOLIET & EASTERN.—**William E. Deaton,** assistant to president, Joliet, Ill., retired.

FORT WORTH & DENVER.—**L. C. Young** appointed freight claim agent, Fort Worth, Tex., to succeed **B. H. Manning,** retired.

Frank A. Smerke, terminal master mechanic, Fort Worth, retired Oct. 31.

FRISCO.—**Martin M. Pomphrey,** executive assistant, St. Louis, named assistant to the president there, with jurisdiction over the public relations and advertising departments.

GREAT NORTHERN.—**Vincent P. Brown,** general freight traffic manager, rates and divisions, named assistant vice president, traffic.

INTERSTATE COMMERCE COMMISSION.—The following have retired: **Lawrence B. Dunn,** hearing examiner, Section of Hearings, Bureau of Rates and Practices, Washington, D. C.; **James P. Collins,** valuation engineer, Section of Valuation, Bureau of Accounts; **Emlyn T. Thomas,** report writer, Board of Suspension, Bureau of Traffic; **Elsie M. Mulik,** transportation analyst, Section of Car Service, Bureau of Safety and Service; **Jane E. Tully,** statistical clerk, Annual Reports Branch, Section of Reports, Bureau of Transport Economics and Statistics; **Albert R. Sward,** auditor (transportation utilities), Indianapolis office, Bureau of Accounts.

JERSEY CENTRAL.—**Edward A. Jeffrey,** trainmaster, Long Branch, N. J., appointed to the dual position of assistant superintendent, Central division, CNJ, and transportation manager, **New York & Long Branch,** succeeding the late **William J. Carroll.**

MILITARY TRAFFIC MANAGEMENT AGENCY.—**Col. Clarence J. Lang,** U. S. Army, has been designated deputy executive director, MTMA, succeeding **Brig. Gen. Edward W. Sawyer,** who will become Commandant, U. S. Army Transportation School, Fort Eustis, Va. For the past three months, Col. Lang has served as special assistant to the Army Chief of Transportation and prior to that was assigned for two years to the Transportation Division, J-4 (Logistics), Office of the Joint Chiefs of Staff.

MILWAUKEE.—**Eric B. Gehrke,** assistant auditor of expenditure, named auditor of expenditure, Chicago, succeeding **Ralph P. Kauppi,** retired. **Willard C. Wilson,** chief disbursement account, replaces Mr. Gehrke.

Elmer P. Barnes, chief clerk, tax department, named tax agent, Chicago, succeeding **William J. Soske,** retired.

MISSOURI PACIFIC.—**Guy E. Dance,** formerly general auditor, Texas & Pacific, Dallas, appointed auditor disbursements, MP, St. Louis, succeeding **Albert A. Griesbauer,** retired (RA, Oct. 30, p. 64).

NEW YORK CENTRAL.—**Grey K. Nelson,** assistant general attorney, Detroit, appointed general attorney, Cleveland, succeeding the late **Wesley A. Wilkinson.**

NICKEL PLATE.—**E. P. Cilley** and **S. Shapiro,** assistant freight traffic managers—rates, Cleveland, promoted to freight traffic managers—rates there. **L. J. Schirmer,** general freight agent—rates, named assistant freight traffic manager—rates. **R. S. Tolan,** assistant general freight agent—rates, succeeds Mr. Schirmer. **R. M. Savodnik** and **M. G. Schobal** named assistant general freight agents—rates.

NORTHERN PACIFIC.—**Walter A. Gustafson** appointed manager of the advertising and publicity department, St. Paul, to succeed **L. L. Perrin,** who retired Oct. 31.

PENNSYLVANIA.—**Frank J. Roth,** passenger manager, Chesapeake Region, Baltimore, Md., transferred to the Pittsburgh region, succeeding **Samuel W. Seeman,** named manager of employee development, Philadelphia (RA, Nov. 6, p. 39).

Louis T. Henderson, western area manager—public relations, Chicago, retires Dec. 1.

SANTA FE.—Effective Nov. 15, **Dr. O. L. Hanson** named chief surgeon for the AT&SF Hospital Assn. and the road's Eastern, Western and Panhandle Lines, Topeka, Kan.

SOO LINE.—**John T. Hall** appointed manager, forest products development.

E. L. Guertin
CPR

Martin M. Pomphrey
Frisco

WABASH.—**Joseph W. Neu,** assistant manager dining and parlor cars, appointed manager dining and parlor cars, to succeed **Pierre E. Griffith,** retired.

Supply Trade

William J. Ennis has been appointed district sales manager in the Chicago area for **Scullin Steel Co.**

Charles A. Taylor, manager, Washington district, **Exide Industrial Marketing Division, Electric Storage Battery Co.,** has been named manager, southeast region, Washington, D. C., succeeding **J. A. Klingensmith,** retired.

Thomas E. Farrell has been appointed marketing manager, Rubber Products division, **Dayco Corp.,** succeeding **J. A. Conlon,** recently named vice president of that division. Mr. Farrell will coordinate all marketing activities in sales, distribution, and merchandising of industrial, agricultural, railway and automotive products.

Dividends Declared

CLEVELAND & PITTSBURGH.—7% regular guaranteed, 87½¢, quarterly; 4% special guaranteed, 50¢, quarterly, both payable Dec. 1 to holders of record Nov. 10.

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS.—5% preferred, $1.25, quarterly, paid Oct. 31 to holders of record Oct. 20.

DENVER & RIO GRANDE WESTERN.—25¢, payable Dec. 18 to holders of record Dec. 1.

ERIE & PITTSBURGH.—87½¢, quarterly, payable Dec. 11 to holders of record Nov. 30.

GREAT NORTHERN. — 75¢, quarterly, payable Dec. 1 to holders of record Nov. 9.

ILLINOIS CENTRAL. — 50¢, quarterly, payable Dec. 15 to holders of record Nov. 10.

KANSAS CITY SOUTHERN.—common, $1, quarterly, payable Dec. 29 to holders of record Nov. 30; 4% preferred, 50¢, quarterly, payable Jan. 15, 1962, to holders of record Dec. 29, 1961.

MAINE CENTRAL.—5% preferred, $1.25, accum., payable Dec. 1 to holders of record Nov. 18.

MOBILE & BIRMINGHAM.—4% preferred, $2, quarterly, payable Jan. 2, 1962, to holders of record Dec. 1, 1961.

NORFOLK & WESTERN.—$1, quarterly; $1, extra, both payable Dec. 8 to holders of record Nov. 10.

NORTHERN CENTRAL.—$2. semiannual, payable Jan. 15, 1962, to holders of record Dec. 29, 1961.

ONTARIO & QUEBEC.—$3, semiannual, payable Dec. 1 to holders of record Nov. 1.

PEORIA & BUREAU VALLEY.—$2.50, semiannual, payable Feb. 1, 1962, to holders of record Jan. 30.

PHILADELPHIA & TRENTON.—$2.50, quarterly, payable Jan. 10, 1962, to holders of record Dec. 29.

PHILADELPHIA, GERMANTOWN & NORRIS.—$1.50, quarterly, payable Dec. 4 to holders of record Nov. 20.

PITTSBURGH, YOUNGSTOWN & ASHTABULA.—7% preferred, $1.75, quarterly, payable Dec. 1 to holders of record Nov. 20.

LETTERS FROM READERS

'Seatrain' Has Arrived

Edgewater, N.J.

To the Editor:

I read with much interest the article in Railway Age of October 30 on the voyage of the "Seatrain New York" to Liberia.

Of several articles on this subject, the one in Railway Age was the most accurate and complete, and I congratulate you on a good piece of transportation reporting.

You may be interested to know that "Seatrain New York" has arrived at Buchanan, Liberia, and is presently [Nov. 2] discharging the cargo.

John L. Weller
President, Seatrain Lines, Inc.

System Is 'Unrealistic'

New York

To the Editor:

After carefully reading "What Target For Non-Ops?" [RA, Sept. 18, p. 56] and the reply of "Veteran Non-Ops" [RA, Oct. 2, p. 33] I substantially agree with the positions stated, particularly in regard to employment in a healthy and expanding industry.

The system by which wages and working conditions are negotiated on a national scale is most unrealistic. While certain well-fixed carriers (in the West for instance) might stand a *moderate* increase in wages at this time, this is far from the case in a large segment of the industry. How can union leaders have the temerity to ask for such an increase of the large eastern roads which have been piling up huge annual deficits for the past few years and others which are marginal propositions at best? Apparently the complete abandonment of one large eastern line and the financial collapse of another does not faze them in the least.

Past experience has borne out the fact that such actions have only resulted in further retrenchment and more automation with a resultant decrease in employment for union members. While our leaders pay lip service to "private enterprise," I do not believe they are overly concerned whether the roads are driven into bankruptcy and nationalization ensues. On the positive side these leaders do not receive anywhere near the amount of support from the rank-and-file as might be supposed. At one moderate sized station in the Mid-West where I happened to be employed, the majority of clerks and operators opposed the stands of the union executives politically.

By the foregoing I do not wish to imply that the unions and their leaders are solely to blame for the unfortunate situation in the industry today. There has been altogether far too much shortsightedness on the part of all concerned in the operation and regulation of the carriers.

Clerk, Eastern Railroad

He Wants the 2 Bits

Wisconsin

To The Editor:

"Veteran Non-Op" in your Oct. 2 issue says that non-ops are satisfied with their present pay. I would like to express the opinion of some 30 clerks in our local lodge.

We have not found 2% of our members in agreement with veteran non-op. We fully realize that some of the union officials' salaries are excessive, but then so are some of the railroad officials' salaries. Take the railroad we work for. Our last pay raise was five cents per hour with other fringe benefits, while the railroad officials' raise was a flat $25 per month.

Salaries in industry in this part of the country exceed those of the railroad clerk and their benefits likewise are much better. For this reason many of our young men have left railroad employment to take jobs that would better their standard of living, and our management is well aware of this fact.

As far as knowing about the 25-cents-per-hour increase in advance is concerned, we are sure that had veteran non-op attended his local lodge meetings and followed the activities of his local and general chairman he would have known in advance, what was going on. We are also sure the 90% of non-ops this fellow says do not want a raise in pay were never reluctant to accept past raises. . . .

Local Freight Agent

[Local Freight Agent takes care not to say whether be believes the proposed raise will help, or hinder the railroads in competing for traffic—hence determining the number of clerical jobs available. If his 30 clerks are reduced to 20, as a result of declining traffic, will that make the two-bits-an-hour a good bargain for the 10 cut-off clerks? —Editor]

How to Train Trainmen

Florence, S.C.

To the Editor:

I enjoy reading "Railroading After Hours." I have some doubts, though, about your October 2 paragraph, "Biggest Pay to Slowpokes."

Several questions come to mind: Just why does this condition (i.e., conductors who voluntarily stretch out their runs into penalty overtime) exist? Is it entirely the fault of the employees? What can be done to eliminate this practice by future employees?

Sometimes the conductors making the most money are those who bring in the most revenue, because they are conscientious in their work and give satisfaction to our customers.

I was hired as a trainman in 1941. I was promoted to conductor in 1944. When I was hired, I was given a letter saying: "Permit bearer to ride your train in order to learn the duties of a trainman." Each train number I was to ride was listed and space provided for conductor to acknowledge I had completed the trip. I was required to ride almost two weeks with different crews—each trip, new territory, without pay. My personal expense was more than normal. I was then required to complete a written rules examination and, after this, I was required to stand an oral examination, purchase a standard watch, pass a rigid physical examination, and complete numerous forms before actually getting on the payroll. Six weeks passed before I received my first check.

I rode with all types of men and had little chance to judge whether they were trying to be helpful, indifferent, or just plain contentious. As I look back on this experience, I can readily recall those who were proud of their skill as a "team," and gave their best to every task.

All employees could become better spokes in the wheel of railway service if they were given proper training and supervision. I personally feel it would be helpful if the students were assigned to a good steady team on a local freight for at least one week.

It seems odd to me to issue switch keys to new employees, permit them to work almost any assignment after a rules examination, and not be better qualified for their work than some of them are. The train employee is entrusted with the safe handling of many thousands of dollars worth of equipment and lading each trip. This responsibility warrants a careful training program in order to encourage best performance.

Howard S. Waddell
Conductor, ACL

[Mr. Waddell's suggestion is constructive. What do other readers think of his ideas?—Editor]

Market Outlook

Carloadings Drop 4.3% Below Previous Week's

Loadings of revenue freight in the week ended Nov. 4 totaled 619,413 cars, the Association of American Railroads announced on Nov. 9. This was a decrease of 28,136 cars, or 4.3%, compared with the previous week; an increase of 19,858 cars, or 3.3%, compared with the corresponding week last year; and an increase of 58,190 cars, or 10.4%, compared with the equivalent 1959 week.

Loadings of revenue freight for the week ended Oct. 28 totaled 647,549 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday Oct. 28

District	1961	1960	1959
Eastern	90,906	86,281	94,545
Allegheny	102,894	96,908	81,182
Pocahontas	55,964	48,929	47,566
Southern	118,254	118,120	116,967
Northwestern	95,403	88,954	69,728
Central Western	128,836	128,689	131,281
Southwestern	55,292	52,926	56,507
Total Western Districts	279,531	270,569	257,516
Total All Roads	647,549	620,807	587,776
Commodities:			
Grain and grain products	60,439	68,383	63,599
Livestock	8,908	10,779	11,154
Coal	116,948	104,132	108,979
Coke	7,535	5,634	3,119
Forest Products	39,536	38,419	41,551
Ore	46,664	36,597	10,853
Merchandise l.c.l.	27,479	35,118	42,415
Miscellaneous	340,040	321,745	306,106
Oct. 28	647,549	620,807	587,776
Oct. 21	650,775	637,573	607,517
Oct. 14	642,172	653,277	579,410
Oct. 7	639,941	645,986	557,576
Sept. 30	638,268	632,227	572,352
Cumulative total, 43 weeks	23,663,955	25,837,637	25,750,343

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Oct. 28 totaled 13,449 cars, compared with 11,586 for the corresponding 1960 week. Loadings for 1961 up to Oct. 28 totaled 484,908 cars, compared with 461,845 for the corresponding period of 1960.

IN CANADA. — Carloadings for the seven-day period ended Oct. 21 totaled 75,390 cars, compared with 68,517 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Oct. 21, 1961	75,390	23,669
Oct. 21, 1960	76,678	25,936
Cumulative Totals		
Oct. 21, 1961	2,824,276	986,385
Oct. 21, 1960	3,001,014	1,132,638

New Equipment

FREIGHT-TRAIN CARS

► *Seaboard.*—Ordered 1,100 freight cars at a total cost of approximately $14,000,000. Deliveries will begin in February and will be completed during the spring of 1962. Seaboard also requested bids on 150 70-ton covered hopper cars to be used in transporting phosphate rock. The 1,100-car order includes 500 70-ton steel box cars from Pullman-Standard at a cost of $7,600,000, to be equipped with roller bearings, cushion underframes, nailable steel floors, aluminum doors and special protective bulkheads; 100 90-ton, jumbo-type, roller-bearing covered hoppers at a cost of $1,400,000, 95 to be built by Magor and 5 by ACF; 300 70-ton open-top hoppers from Greenville Car at a cost of $2,500,000, and 200 70-ton steel woodchip cars, costing $2,500,000, also from Greenville Car. Seaboard President John W. Smith noted that steel woodchip cars are in increasing demand as part of the paper industry's wood conservation program.

PASSENGER-TRAIN CARS

► *Westinghouse Electric Corp.*—Received an order valued at approximately $4,750,000 to provide electrical equipment for 118 new subway cars being built for the New York City transit system by St. Louis Car.

PIGGYBACK

► *Missouri Pacific.*—Has placed in operation 64 additional piggyback trailers "to meet the growing requirements of shippers." On order are eight additional tractors for over-the-road highway service provided by Missouri Pacific Freight Transport Co.

FOREIGN

► *Argentina.*—Ordered 70 all-purpose, 1,200-hp diesel-electric locomotives from Montreal Locomotive Works at a cost of approximately $14,000,000. The broad-gage DL-535 units are scheduled for delivery in 1962.

New Facilities

► *Winnipeg.*—Is considering construction of a $265-million subway system to ease growing traffic congestion. Plans for the system are to be presented soon to the Metro Council, transit authority for the area.

Capital Improvements

► *Northern Pacific.*—Will spend $21,000,000 for improvements and new equipment in 1962. Included are $739,080 for ballasting 101 miles of main and branch-line track; $727,640 for bridges, culverts and trestles; $3,463,915 for relaying 42 miles of main-line track and 40 miles of branch and secondary track; $2,124,835 for signal and interlocking improvements, including installation of CTC between Huntley and Billings, Mont., and between Spokane, Wash, and Kootenai, Ida.; $510,760 for communications, including installation of microwave between Seattle and Portland; $10,516,500 for new freight-car construction and improvements to existing equipment.

Get Bigger Results...

with Men Trained in RR Supervision

Now you can take a big step forward to improve human relations and solve operational problems... keep jobs running smoothly and efficiently... with the aid of a carefully developed training program for supervisors and for men preparing for supervisory work.

To meet the growing demand for just such a training program, a brand new two-year course in the fundamentals of supervision has been designed especially for railroad men by the Railway Educational Bureau.

Here you have a home study course based on a highly specialized series of texts covering the latest methods of supervision. The first half deals with the human side of supervision; the second with the material side (costs, planning, etc.). Designed especially for railroad men, it is prepared in *railroad* language, deals with actual *railroad* situations.

Railroad executives and department heads now can train designated personnel at moderate cost. The intensive two-year course includes library and consultation service. Order today or send for more complete information and price schedule.

Railway Educational Bureau

Mail this coupon:

Railway Educational Bureau RA 10-30
1809 Capitol Ave., Omaha 2, Neb.

☐ I would like to order the Railway Educational Bureau supervision course for _____ of my employees (list of names attached.) Send me full particulars, including cost involved.

☐ I have not received your free descriptive folder. Please send me one without obligation.

Name_____ Title_____

Company_____

Street_____ City_____ Zone____ State_____

NIT League to Make Major Policy Decisions

When the National Industrial Traffic League holds its annual meeting at Denver Nov. 16-17 its members will consider, and establish League policy on, committee recommendations concerning:

a) Opposition to any legislation which would establish compulsory arbitration in labor matters in the transportation industry.

b) Revision of the present rate-making rule policy.

c) Application of Interstate Commerce Act Section 203 (b) (6)—the agricultural commodities exemption.

d) The proposed national Census of Transportation.

e) Intrastate legislative motor carrier routing restrictions, with specific reference to attempts to control individual routing of shipments by legislative fiat within any state.

Additionally, individual members have requested "reconsideration and revision" of League policy on the Commodities Clause and on user charges for government-provided waterway facilities. The present League position is to oppose continuance of the Commodities Clause, and to endorse the principle of waterway user charges.

New PFE Plan II Rates Offer Loading Incentives

New rates for PFE's proposed Plan II perishable piggyback service will become effective Nov. 20 (RA, Oct. 23, p. 8). With the new rates, PFE and its owning lines, Southern Pacific and Union Pacific, hope to provide greater flexibility in service to shippers and receivers and to meet competition from unregulated motor carriers.

PFE has ordered 400 refrigerated trailers to handle frozen foods, fresh fruits and vegetables eastbound from California and Arizona to destinations generally west of the Missouri River. Westbound, the equipment will handle malt liquors, fresh meats and packing house products from midwestern points such as Dubuque, Des Moines and the Twin Cities and points west to California and Arizona.

The proposed TOFC rates for eastbound movement of perishables, including refrigeration, are based on two trailers per flat car with incentives for increased minimum weight per shipment. At 50,000 pounds minimum the rate per hundred pounds will be $1.78 to Kansas City, $1.86 to Minneapolis, $1.53 to Denver and $1.73 to Houston. The rate will decrease ten cents per hundred pounds as minimum weight per shipment increases to 60,000, 70,000 and 80,000 pounds.

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District	1961	1960	1959
Eastern	90,906	86,281	94,545
Allegheny	102,894	96,908	81,182
Pocahontas	55,964	48,929	47,566
Southern	118,254	118,120	116,967
Northwestern	95,403	88,954	69,728
Central Western	128,836	128,689	131,281
Southwestern	55,292	52,926	56,507
Total Western Districts	279,531	270,569	257,516
Total All Roads	647,549	620,807	587,776
Commodities:			
Grain and grain products	60,439	68,383	63,599
Livestock	8,908	10,779	11,154
Coal	116,948	104,132	108,979
Coke	7,535	5,634	3,119
Forest Products	39,536	38,419	41,551
Ore	46,664	36,597	10,853
Merchandise l.c.l.	27,479	35,118	42,415
Miscellaneous	340,040	321,745	306,106
Oct. 28	647,549	620,807	587,776
Oct. 21	650,775	637,573	607,517
Oct. 14	642,172	653,277	579,410
Oct. 7	639,941	645,986	557,576
Sept. 30	638,268	632,227	572,352
Cumulative total, 43 weeks	23,663,955	25,837,637	25,750,343

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Oct. 28 totaled 13,449 cars, compared with 11,586 for the corresponding 1960 week. Loadings for 1961 up to Oct. 28 totaled 484,908 cars, compared with 461,845 for the corresponding period of 1960.

IN CANADA. — Carloadings for the seven-day period ended Oct. 21 totaled 75,390 cars, compared with 68,517 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Oct. 21, 1961	75,390	23,669
Oct. 21, 1960	76,678	25,936
Cumulative Totals		
Oct. 21, 1961	2,824,276	986,385
Oct. 21, 1960	3,001,014	1,132,638

New Equipment

FREIGHT-TRAIN CARS

► *Seaboard.*—Ordered 1,100 freight cars at a total cost of approximately $14,000,000. Deliveries will begin in February and will be completed during the spring of 1962. Seaboard also requested bids on 150 70-ton covered hopper cars to be used in transporting phosphate rock. The 1,100-car order includes 500 70-ton steel box cars from Pullman-Standard at a cost of $7,600,000, to be equipped with roller bearings, cushion underframes, nailable steel floors, aluminum doors and special protective bulkheads; 100 90-ton, jumbo-type, roller-bearing covered hoppers at a cost of $1,400,000, 95 to be built by Magor and 5 by ACF; 300 70-ton open-top hoppers from Greenville Car at a cost of $2,500,000, and 200 70-ton steel woodchip cars, costing $2,500,000, also from Greenville Car. Seaboard President John W. Smith noted that steel woodchip cars are in increasing demand as part of the paper industry's wood conservation program.

PASSENGER-TRAIN CARS

► *Westinghouse Electric Corp.*—Received an order valued at approximately $4,750,000 to provide electrical equipment for 118 new subway cars being built for the New York City transit system by St. Louis Car.

PIGGYBACK

► *Missouri Pacific.*—Has placed in operation 64 additional piggyback trailers "to meet the growing requirements of shippers." On order are eight additional tractors for over-the-road highway service provided by Missouri Pacific Freight Transport Co.

FOREIGN

► *Argentina.*—Ordered 70 all-purpose, 1,200-hp diesel-electric locomotives from Montreal Locomotive Works at a cost of approximately $14,000,000. The broad-gage DL-535 units are scheduled for delivery in 1962.

New Facilities

► *Winnipeg.*—Is considering construction of a $265-million subway system to ease growing traffic congestion. Plans for the system are to be presented soon to the Metro Council, transit authority for the area.

Capital Improvements

► *Northern Pacific.*—Will spend $21,000,000 for improvements and new equipment in 1962. Included are $739,080 for ballasting 101 miles of main and branch-line track; $727,640 for bridges, culverts and trestles; $3,463,915 for relaying 42 miles of main-line track and 40 miles of branch and secondary track; $2,124,835 for signal and interlocking improvements, including installation of CTC between Huntley and Billings, Mont., and between Spokane, Wash, and Kootenai, Ida.; $510,760 for communications, including installation of microwave between Seattle and Portland; $10,516,500 for new freight-car construction and improvements to existing equipment.

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NIT League to Make Major Policy Decisions

When the National Industrial Traffic League holds its annual meeting at Denver Nov. 16-17 its members will consider, and establish League policy on, committee recommendations concerning:

a) Opposition to any legislation which would establish compulsory arbitration in labor matters in the transportation industry.

b) Revision of the present rate-making rule policy.

c) Application of Interstate Commerce Act Section 203 (b) (6)—the agricultural commodities exemption.

d) The proposed national Census of Transportation.

e) Intrastate legislative motor carrier routing restrictions, with specific reference to attempts to control individual routing of shipments by legislative fiat within any state.

Additionally, individual members have requested "reconsideration and revision" of League policy on the Commodities Clause and on user charges for government-provided waterway facilities. The present League position is to oppose continuance of the Commodities Clause, and to endorse the principle of waterway user charges.

New PFE Plan II Rates Offer Loading Incentives

New rates for PFE's proposed Plan II perishable piggyback service will become effective Nov. 20 (RA, Oct. 23, p. 8). With the new rates, PFE and its owning lines, Southern Pacific and Union Pacific, hope to provide greater flexibility in service to shippers and receivers and to meet competition from unregulated motor carriers.

PFE has ordered 400 refrigerated trailers to handle frozen foods, fresh fruits and vegetables eastbound from California and Arizona to destinations generally west of the Missouri River. Westbound, the equipment will handle malt liquors, fresh meats and packing house products from midwestern points such as Dubuque, Des Moines and the Twin Cities and points west to California and Arizona.

The proposed TOFC rates for eastbound movement of perishables, including refrigeration, are based on two trailers per flat car with incentives for increased minimum weight per shipment. At 50,000 pounds minimum the rate per hundred pounds will be $1.78 to Kansas City, $1.86 to Minneapolis, $1.53 to Denver and $1.73 to Houston. The rate will decrease ten cents per hundred pounds as minimum weight per shipment increases to 60,000, 70,000 and 80,000 pounds.

British Transit Men Tour U.S.

"The motor car abhors a vacuum," says London Transport Executive's chief commercial and public relations officer, R. M. Robbins. "If rapid transit tends to empty city streets, motor cars rush in to fill them." To keep their cities from being engulfed, Mr. Robbins adds, transit men are being forced to continually develop new ideas and they are doing so.

With a new 11-mile subway addition in the offing, a team of London Transport officers has just completed a seven-week tour of United States and Canadian cities, comparing American practice with that of London Transport, and looking for any new ideas that might be helpful. The group was headed by B. H. Harbour, board member of the LTE. The group included, in addition, F. G. Maxwell, operating manager (railways) of LTE; A. C. Edrich, civil engineer, maintenance, LTE, and Mr. Robbins.

The London Transport team had three goals in mind in coming to America. They wanted to look specifically into American subway technology. They wanted to see first-hand what was being done about freeing city streets from traffic and specifically what the effect on cities is of a concentration of expressways dumping automotive traffic on city streets. And, finally, they wanted to check standards of performance, so far as they are comparable, of London Transport with those of American transit operations.

In the course of their travels, the LTE group visited Los Angeles, San Francisco, Chicago, New York, Philadelphia, Toronto, Montreal, Washington, Cleveland and a number of other cities. The only city with extensive rapid transit they missed—and that only because of problems of timing—was Boston.

"The encouraging and stimulating thing," says Mr. Robbins, "is that everywhere we went, people are alive and kicking. Practically everywhere, everybody is very active. They're doing a lot of thinking—tearing pre-conceived ideas to bits if they have to, to come up with new ideas that might work.

"This is enormously impressive, really," Mr. Robbins adds, "because the occupational disease of a railroader is to jell the existing pattern, stick with the status quo. The people we talked to are overhauling everything, end-to-end, and going on within the limitations of funds and revenues available.

"In technical practices," says Mr. Edrich, "I found it very impressive that people are asking, 'Why do we have to do this?' The habits of years have been thrown away. We came here to observe, but people kept asking us what we do. I've been very much under cross-examination as to what we do in London. Nobody in America takes anything for granted."

With regard to their specific goals, the London Transport group gathered information in all three areas of interest. In American transit technology, two things were of special interest—the acceleration and deceleration rates of subway equipment and San Francisco's plan to sell automatically tickets at differential fares for given distances and then to collect the right tickets at destination. "This would be for us a very important benefit from automation," says Mr. Robbins. "The point of the thing that went to our hearts is that it is a differential fare."

The flat fare in effect in most American transit operations seemed to the LTE group a practice that while it may have been inevitable has had very unhappy effects on the economic position of transit undertakings.

"By the flat fare, which is continually rising," says Mr. Robbins, "you are saying to casual short-distance riders, in effect, 'Keep Off.' " The subways in New York and elsewhere as well as the transit operations all over the country, he adds, seem to be almost forced to gear themselves to getting people to and from work. There are also some business people traveling between the peaks. But nobody seems to regard the shifting of casual passengers —which in London, at least, accounts for a substantial proportion of revenues —as of much importance.

On their second point of inquiry—the effect on cities of an over-emphasis on auto highways and under-emphasis on rapid transit—Mr. Robbins comments restrainedly that no one seems to have solved the problem yet.

With London on the verge of the superhighway era, though, Mr. Robbins comments on the frustration—in human terms—over-emphasis on the motor car can bring. "It should be the objective of planning, as I see it," he says, "to reduce the time people spend in being transported. It's wasted time, in most cases. What a terrible thing a child faces being born in a motor city. How many hours, from cradle to grave, will he sit behind the wheel of his motor car when he does not want to, unable to serve any useful function?"

It may not have been true a few years ago, Mr. Robbins adds, but today, "practically every responsible official we talked to, not only in transit but in city planning and municipal government, has said as a matter of conviction that they can't see any possible future for big metropolitan cities without mass transport."

Heineman Renews Rate Plea

C&NW Chairman Ben W. Heineman, attacking proposals to restrict rail rate-making freedom, declared last week that minimum rate regulation by the Interstate Commerce Commission is a curtailment of management function of pricing in a competitive area.

"What is there about this industry," he asked, "that warrants singling it out from any other competitive industry in having its business allocated not by a market mechanism, but by 11 wise men having complicated cost data presented to them in a few quasi-judicial hearings?"

Speaking at a Chicago Traffic Club forum Nov. 8, Mr. Heineman again proposed that Interstate Commerce Commission power to regulate rates on the down side be removed. "I never thought it destructive to improve efficiency, and lower rates to recapture traffic or business."

He further proposed that railroads' power to price should be subject only to the regulation of the anti-trust laws.

He declared that if this were to take place some marginal carriers would go out of business but that private carriage would also tend to diminish.

"In due course," he said, "each of the various modes would find its appropriate level subject to the restraining influence of the anti-trust laws against sheer, predatory, below-cost price cutting."

Appearing with Mr. Heineman at the Chicago debate were James F. Pinkney, chief counsel, public affairs, American Trucking Associations, and J. W. Hershey, chairman of the board, American Commercial Barge Lines.

The waterway and trucker spokesmen argued for less rate-making freedom to "preserve the inherent advantages" of all modes of transportation.

NYC, PRR RESUME MERGER NEGOTIATIONS (*Continued from page 9*)

is running out, and we have no choice but to try every means at hand to help our companies better their ability to compete more effectively in the transportation field, and to avoid government ownership. It is believed that better service to the public by the merged railroads will be one of the most beneficial results if a decision to proceed is reached and authority is given to effect such a merger."

The New York Central-Pennsylvania announcement came as a statement of intentions rather than of accomplishment. There is still a long road to travel before the two railroads can be joined.

Nevertheless, the statement did much to clarify the eastern merger situation —which had been confused to a large extent by the question of where the Central would wind up.

Although technically NYC and PRR will be resuming merger talks at the point where they were broken off nearly three years ago, from the point of view of political realities they are much further along now than they were in January, 1959.

When initial studies for the NYC-PRR merger were announced on Nov. 1, 1957, mergers were a rarity on the twentieth-century railroad scene. The only merger of major lines to have taken place in the recent past was that in which the Nashville, Chattanooga & St. Louis was merged into the Louisville & Nashville (RA, Sept. 9, 1957, p. 18). Studies were under way on several proposals, such as that for the even larger (with 24,000 miles) Great Northern-Northern Pacific-Burlington-Spokane, Portland & Seattle and that for Erie-Delaware, Lackawanna & Western-Delaware & Hudson, but even the most optimistic proponents of mergers conceded that bringing their plans to fruition would be a long time in the future.

When NYC-PRR merger talks were suspended in January, 1959, a change in the merger climate had already begun to take place.

NYC President Perlman said, at the time of breaking off PRR talks, that when PRR-NYC discussions began, no other roads were interested, although, he emphasized, other roads had an opportunity to participate. As the NYC-PRR talks continued, Mr. Perlman noted, other groups began to show interest in mergers. A group of eastern roads met in Cleveland to discuss the "impact" of a PRR-NYC merger (although they denied they were contemplating a counter merger) and five New England roads began to talk about merging into a New England regional system.

It was this change in climate, Mr. Perlman said, when he announced the 1959 suspension of PRR-NYC talks, that led NYC's board of directors to suspend studies with the PRR and in doing so to recommend that all eastern roads, through the ERPC, consider merging into "three or four systems of nearly balanced economic strength—consisting of both large and small railroads." Mr. Perlman added that if nothing came of these broader talks, he would like to see studies with the PRR resumed.

Nothing—at least nothing formal—did come of NYC's suggestion that ERPC sponsor studies of the possibility of merging eastern roads into three or four balanced systems. The seven roads (B&O, C&O, DL&W, D&H, Erie, NKP and Reading) that had met to consider the impact of a PRR-NYC merger announced suspension of their own talks, and the New England roads suspended their discussions indefinitely.

Nevertheless, the initial steps had been taken—and eastern railroad mergers were on their way.

Of the seven roads that met at Cleveland to consider the impact of NYC-PRR talks, two (Erie and DL&W) are already merged, and three more (B&O, C&O and NKP) are involved in merger proposals now before the Interstate Commerce Commission for approval. Both the New York Central and the Pennsylvania have also appeared at ICC hearings on merger proposals since NYC-PRR talks were suspended.

Mr. Perlman, in announcing the 1959 suspension of talks with the PRR, had suggested that two alternatives to a merger of NYC with PRR might be preferable: coordination of facilities of the two roads, and/or realignment of eastern roads into "three or four systems of nearly balanced economic strength—consisting of both large and small railroads."

PRR Chairman Symes commented following NYC's 1959 announcement, "Quite frankly I am disappointed . . . . I too, am pleased with the results of the studies, but am amazed as to the lack of any definitive action by them in connection therewith. It is well recognized throughout the industry that coordination of facilities is not a substitute for corporate mergers—if it were, the question of mergers would not now be considered."

If coordination was found wanting as an alternative to merger, mergers themselves suffered no such disadvantage.

The first major merger to follow the 1959 suspension of NYC-PRR talks was that of the Virginian into the Norfolk & Western, which took effect on Dec. 1 of that same year (RA, Dec. 7, 1959, p. 40). Second major merger to be consummated was that of the Erie and the DL&W into the Erie-Lackawanna, which became official on Oct. 17, 1960.

The speed with which these mergers were proposed, approved and carried out suggested that mergers could no longer be considered only as a remote possibility. And several other plans were quickly announced.

Chesapeake & Ohio proposed to acquire control of and eventually merge with Baltimore & Ohio, thereby creating an 11,033-mile system in the East. New York Central asked to be included in the C&O-B&O tie-ups, and—failing to get C&O approval to a three-way proposition—sought to obtain approval of B&O stockholders to a merger of B&O with NYC.

In a contest of rival exchange offers for B&O stock, C&O came out ahead of New York Central. Hearings before the ICC on competing applications of C&O and NYC for control of B&O were opened June 19, recessed in July and reopened Sept. 11.

Meanwhile, the results of another merger proposal began to take shape as a "balanced eastern system." The

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Norfolk & Western suggested that the Nickel Plate be merged into N&W and that the new road lease the Wabash. Since N&W and NKP do not join, PRR's Sandusky line would be purchased as a connecting line. New York Central and Erie-Lackawanna both intervened asking to be included in the proposed merger (RA, April 10, p. 36).

The N&W-NKP-Wabash proposal was labeled by opponents as a "Pennsylvania family merger" since PRR owned about one-third of N&W stock and controlled the Wabash. Pennsylvania, which after NYC talks were suspended, became formally involved in only one control proposal—its application to acquire, through exchange of stock, the remaining stock of the Lehigh Valley in addition to the 44.4% of stock it already owns—denied the charge.

Norfolk & Western's willingness to talk inclusion in the "family" with such shorter eastern roads as Erie-Lackawanna and Pittsburgh & West Virginia (RA, Oct. 30, p. 59) went far towards removing opposition by other roads to N&W's plans, but the New York Central's place in the eastern merger picture remained uncertain.

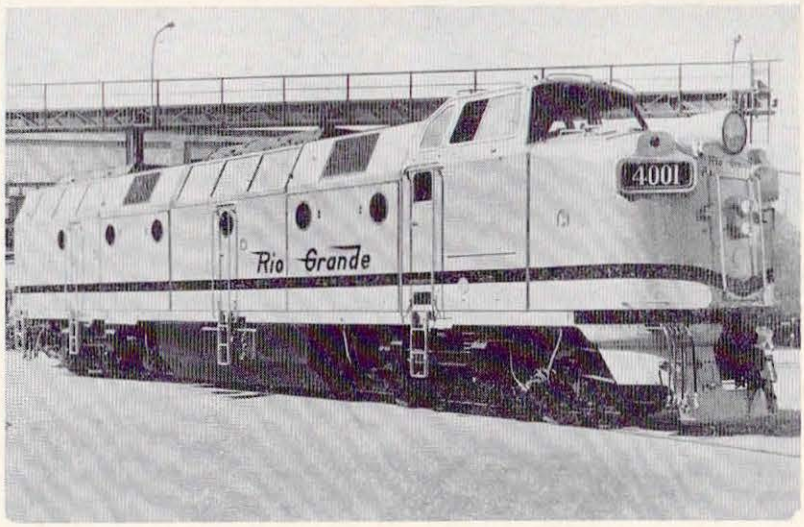
Last week's joint announcement by NYC and PRR brought the picture in focus again. While a merger of NYC and PRR would be bigger than any of the presently proposed eastern systems (B&O-C&O would be 11,033 miles and N&W-NKP-Wabash-Erie-Lackawanna would be 10,600 miles compared to NYC-PRR's 20,131 miles), it would still be smaller than the 24,000-mile system proposed as the Great Northern Pacific & Burlington.

B&M Creates Systems And Research Department

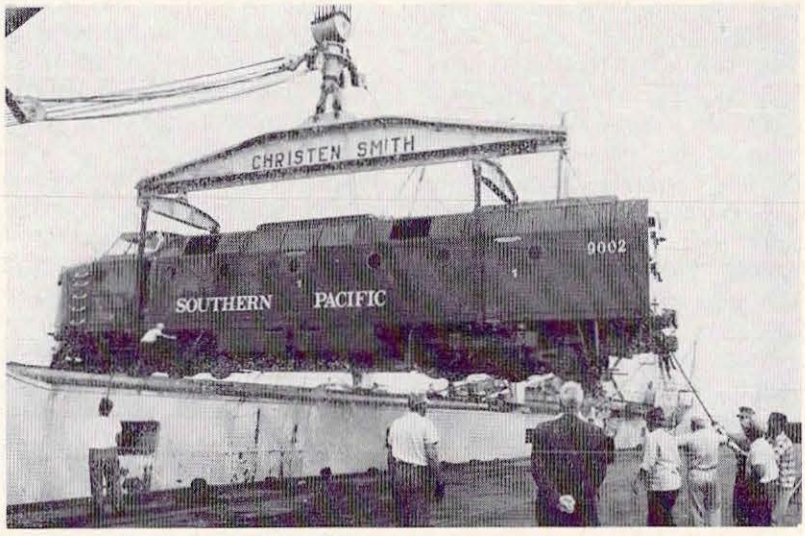
Boston & Maine last week announced the creation of a new Systems and Research Department that will "progress a concentrated systems development service and electronic hardware utilization program on a company-wide scale."

B&M President P. B. McGinnis said the department will plan new uses for a computer system installed earlier this year. "New data collection systems will be implemented to provide management a level of operations control for decision-making and long-range planning," he added. "Research functions will continue to supply the railroad with the most modern methods, equipment, and related information available to the industry."

Director of the new department is Alburn J. Connell, formerly director of methods and research.



READY FOR ROCKIES: D&RGW expects three units to outperform five.



OVER THE SIDE, SP unit is lifted from hold of S. S. Christen Smith.

Diesel-Hydraulics Arrive

German-built diesel-hydraulic road freight locomotives which were unloaded from a freighter at Houston, Tex., on Oct. 31 had, by last week, reached the terminals out of which they will probably be operating. Scheduled for mountain service on both roads, the three Southern Pacific locomotives will apparently be based at Roseville, Cal., for runs over the Sierras; the three Denver & Rio Grande Western units were in Denver for testing in the Rockies. "Our three units coupled will do about the same job we are now doing with five 1,750-hp diesel electrics, but will do the job faster," A. N. Bisgard D&RGW's assistant chief mechanical officer predicted. Rated at 4,000-hp each, these are the first high-capacity diesel locomotives with hydraulic transmissions to be operated in the U.S.; they are the first foreign-built locomotives purchased by U.S. railroads in over a half century. The diesel-hydraulic, a very popular locomotive with some European railroad systems, will be receiving its first test under U.S. operating conditions. Following completion at the Krauss-Maffei plant in Munich, West Germany, these locomotives were tested in Germany and Austria prior to shipment to the U.S. (RA, July 24, p. 20). Each of the 165-ton units has a pair of high-speed Maybach engines, each of which powers one of the two 3-axle trucks.

You Ought To Know...

All railroad carbuilding operations of ACF Industries will be consolidated in three of its American Car & Foundry Division plants—Milton, Pa., Huntington, W. Va. and St. Louis, Mo. The Berwick, Pa., shops will be closed after completion of the current work backlog in late 1962. Freight and tank car production facilities will be consolidated and modernized at the three remaining plants, says William T. Taylor, ACF chairman. ACF, he added, will have ample capacity to handle annual freight car volume equal to that in any of the last 10 years, plus adequate reserve capacity to satisfy extraordinary demands well beyond present forecasts of future business. The company will not build passenger cars, Mr. Taylor said. However, it will continue to maintain design and engineering capabilities for passenger equipment and will offer this service on a consulting basis to transit agencies and to domestic and foreign manufacturers.

Youngstown Steel Car Corp. "will cease operations immediately," it was announced last week by James L. Kelly, vice president and general manager. The firm, which manufactured railroad equipment and various steel products, was a wholly-owned subsidiary of Consolidated Freightways, Inc.

Containerization promises to create "a whole new market for transportation equipment," says the Value Line Investment Survey. By the mid-1960's, says the survey, production of specialized equipment for use in containerization "could once more place the railroad equipment makers in the enviable position they enjoyed in the immediate post-war period . . . when the diesel locomotive and piggybacking first gained widespread acceptance."

Experimental fare reductions on rail commuter lines may be subsidized by the federal government to determine if lower fares would bring more riders, says Dr. Robert C. Weaver, administrator of the Housing and Home Finance Agency. The experiment would be a pilot project under the urban transportation provisions of the 1961 Housing Act. Also being considered is a plan for creating additional parking facilities on commuter lines.

"Super-annuated jalopies" are clogging U. S. rails because of restrictive government policies which discourage the purchase of new rolling stock, the American Railway Car Institute told the U. S. Treasury Department. ARCI Executive Vice President Walter Renz called on the Treasury to grant a 15-year maximum depreciation rate for railroad cars.

Railroads are forced to "operate a 1961 business under 1920 regulations," U. S. Rep. James E. Van Zandt (R.-Pa.) told the Eastern Group, Purchases and Stores Division, AAR, at Philadelphia last week. Calling for more rate-making freedom to permit the industry to thrive, the Congressman noted: "Many cities that have allowed their rail lines to disappear are belatedly finding out that they will have to be rebuilt, and at far higher cost."

Canadian National and Grand Trunk Western have joined North America Car Corp.'s NITX car leasing pool. This action brings to 13 the number of railroads in the pool and also marks Grand Trunk's entry into the field of piggyback and the rail transport of automobiles.

"Railroads of Tomorrow" is the theme of the 16th annual Railroad Management Institute to be held Jan. 8-18, 1962 at American University, Washington, D. C. The institute will examine "what can and should be done by government, labor, shippers and by the railroads themselves" to revitalize the industry. Transportation and business leaders, including AAR President D. P. Loomis, will serve as lecturers and discussion leaders.

"The specter of nationalization hangs more heavily over portions of the American transportation system today than at any time since the dark depression days of the mid-thirties," Harold F. Hammond told last week's meeting of the Conference of National Organizations in Miami Beach. Mr. Hammond, executive vice president of the Transportation Association of America, added: "If those individuals shouting for nationalization of transportation are to be quieted and trends in that direction are to be reversed, the general public and the government, both federal and state, will have to show greater concern about the plight of the common carriers and take positive steps to reverse the present trend."

REA express has received permission from ICC to postpone effective date of its container rate to Jan. 12, to permit more precise study of relationship of container rates to carload freight rates. The action followed decision last week by ICC's Board of Suspension not to suspend the rate.

First non-railroad officer elected to the board of REA Express is C. E. Woolman, president and general manager of Delta Air Lines. Because of REA's indirect air-carrier status (through Air Express service), Mr. Woolman's election is subject to approval by the CAB.

Joint rail-truck rates filed last week by the Bangor & Aroostook and Fox & Ginn, Inc. may double the railroad's less-carload business, says W. Gordon Robertson, BAR president. The rates, said to be the first such joint venture in the area, become effective Dec. 4. The new service applies only to shipments between northern Maine and southern and central Maine. The rail portion of the joint movements will be handled through Northern Maine Junction. Local delivery to customers in northern Maine and pick-up of southbound traffic will be handled by BAR trucks. LCL shipments for southern Maine will be trucked to Northern Maine Junction by Fox & Ginn. There will be no change in present rail LCL service, nor in truck service by Fox & Ginn.

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Umbrella or Shillelah?

Like the poor but honest maiden whose only resource was her chaste comeliness, the railroads (as far as freight service is concerned) also face the world with only one asset—that is, their ability to provide line-haul movement of all varieties of products at far lower economic cost than any other type of carrier. Included with this highly valuable attribute is their ability to move a fully loaded car at only an insignificant increase above the cost of moving one that is lightly loaded or not loaded at all; and their ability to handle multiple cars at considerably lower cost than those handled singly.

Deprive railroads, by regulation, of the right to make full use in competition of their superior line-haul economy, and they are out of the competitive running; and that is exactly what has happened to them, time and time again.

But regulation does not similarly intervene to curtail or destroy the "inherent advantage" of truck transportation—which consists in direct door-to-door service (usually faster than railroad service); and in simpler packaging and loading requirements. These advantages of truck transportation may serve to offset, and then some, a great deal of the railroads' superior economy in the line haul. But regulators never act to restrict in any way the full competitive impact of the natural advantages of truck transportation. Meantime, restricting or destroying the railroads' natural advantage of line-haul economy is standard practice.

Spokesmen for water and highway carriers have been conducting a systematic campaign against so-called "selective rate-cutting" by railroads, demanding that "fully distributed costs" be used as the "floor" for railroad rates. They repeatedly accuse the Interstate Commerce Commission of siding with railroads in permitting railroads to reflect their relative costs in competitive rate-making, as indeed the ICC should do, in obedience to Sec. 15a(3) of the Interstate Commerce Act.

From a look at some recent ICC rate decisions, it is quite evident that the criticisms of water and motor carriers as to the way the ICC is regulating railroad rates are exaggerated. For example, several decisions have proclaimed the water lines to be the "low-cost carrier," and have forbidden railroads to offer rates as low as water line rates, even where railroads could clearly do so at a profit. In one such case, involving movement of phosphate rock from Florida to Virginia, the favored water carrier was a bulk carrier—hence not subject to ICC jurisdiction. Nevertheless, the Commission protected this unregulated water carrier from competition by railroads, even though it could not have prevented the water carrier from undercutting the railroad rates, if the water carrier desired to do so. Regulation of competitive rates is strictly a one-way street for the railroads, with no effective restrictions at all on their rivals.

In a case decided October 24, the ICC's Division 2 (Commissioner Freas dissenting) ordered railroads to cancel reduced rates on brandy from the Pacific Coast to eastern destinations, the rates having been protested by water carriers. The proposed railroad rates were admittedly highly compensatory. It is difficult to find a reason for such a decision as this, unless it be that the Commission is sensitive to the propaganda campaign by water lines and truck operators against "selective rate-cutting" by railroads; and is inclined to save Congress the chore of enacting S.1197, by regulating railroads just as if that legislative proposal to repeal Sec. 15a(3) were already on the statute books.

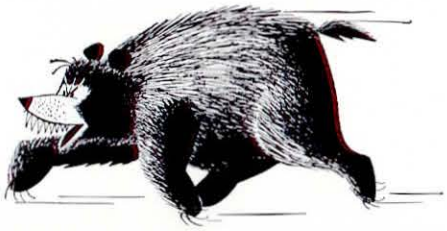
The situation of the railroads under regulation is like that of the innocent party in an automobile accident, who is made to appear guilty by the loud talk and the wild accusations of the fellow who actually was at fault. Railroads are always the victimized party in these competitive rate cases. They are the victims because, in most such litigation, they are the only party the regulators can restrain or punish—two-thirds of their highway competition and some 90% of their water competition being free from regulatory restraint.

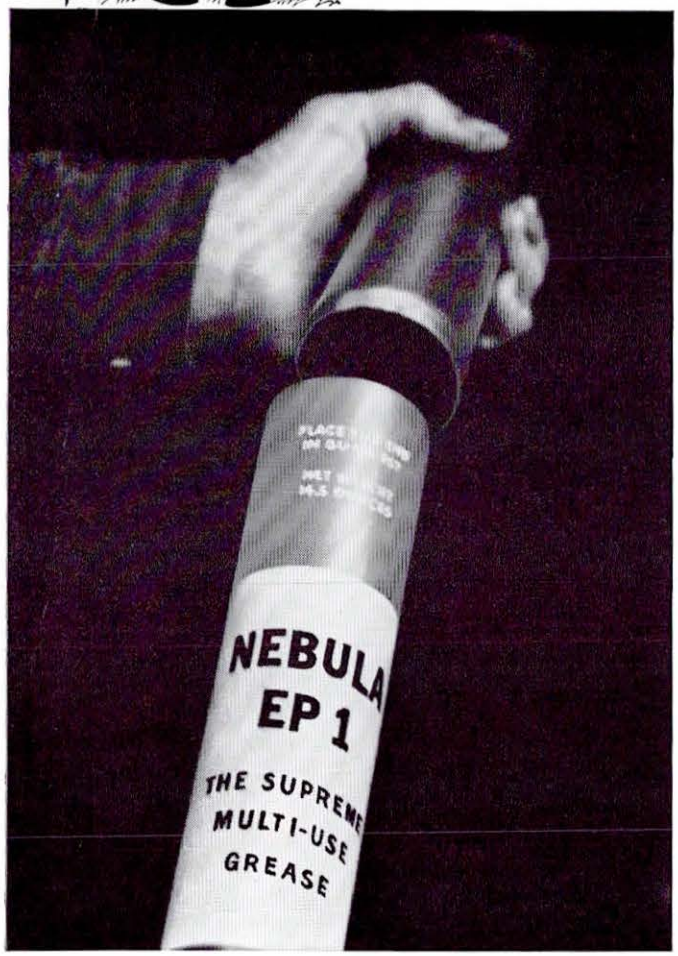
TIME TO STRIKE BACK

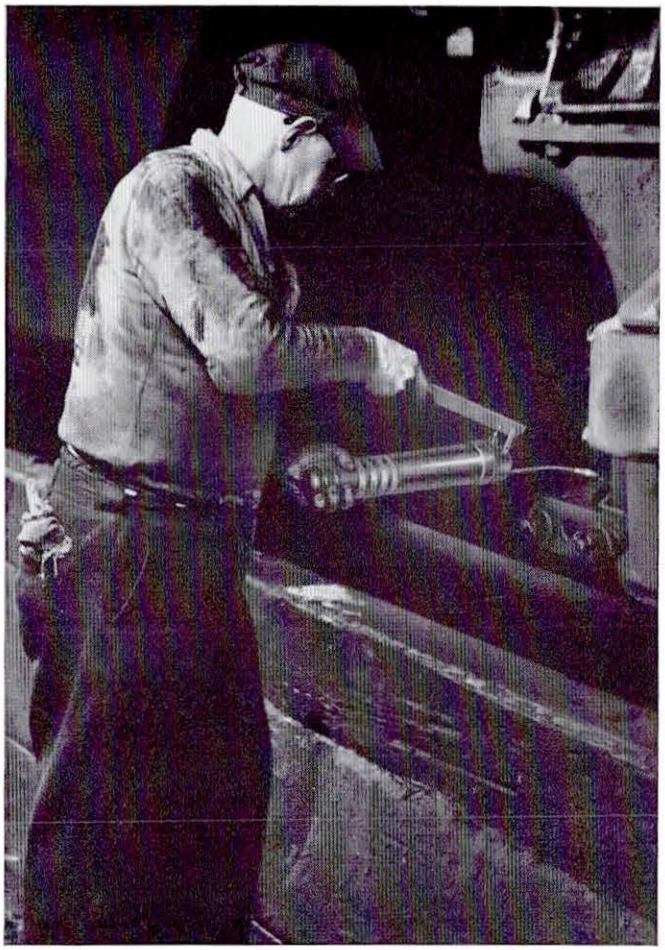
Thus, the rate "umbrella" continues to be brandished with unrestrained vigor by the regulators against railroads and in favor of their rivals. It is an error to use an inoffensive term, such as umbrella, to characterize so dangerous a weapon—it's more like a shillelah. And, meantime, in two or three speeches per week (as everybody who reads the transportation news in the daily papers knows) a systematic propaganda campaign, as skillful as it is mendacious, is going on to intimidate the Commission into making more and more decisions which conform to the spirit of S.1197, that so far has not been approved by Congress. It's about time the railroads—the real and only victims of rate regulation—let themselves be heard louder and more often on this issue.

When railroads fall into the hands of government, they never have to operate under the restraints that burden them in this country. It's time that this fact were made more generally known among opponents of socialization.

Why mess with a muzzle-loader?







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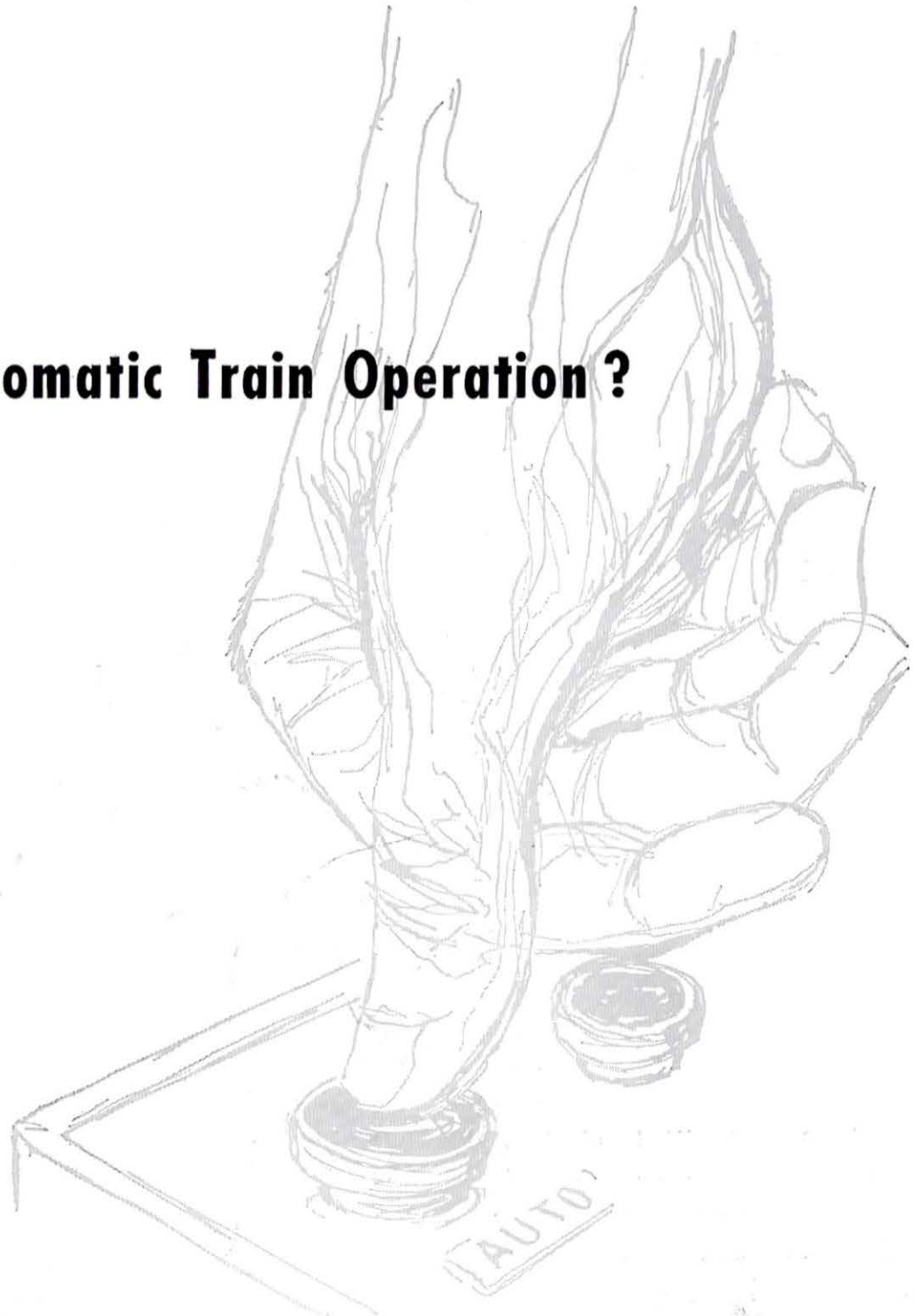

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**Write for Bulletin 197.*

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